A PROFITABLE Booke, declaring diuers approoued *Remedies, to take out ſpots*

and ſtaines in Silkes, Veluets, Linnen and Woollen Clothes:

With diuers Colours how to die

Veluets and Silkes, Linnen and Woollen, Fuſtian and Thread:

Alſo to dreſſe Leather, and to colour

Felles. How to guild, graue, ſowder, and Verniſh. And to harden and make ſoft

Yron and Steele.

Verie neceſſarie for all men, ſpecially for thoſe which haue or ſhall haue any doing therein: with

a perfect Table hereunto, to finde all thinges readie, not the like reuealed in Engliſh heretofore.

Taken out of Dutch, and Engliſhed by L. M.

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To make Cloth which hath loſt his Colour, to returne vnto his firſt eſtate againe.

TAKE OF VNQVENched lyme two ounces, of Oake aſhes two ounces of cleare water two pound. Then meddle thē well all together, and ſo let them reſt a quarter of an houre, and then clarifie that water, & therewith waſh your cloth, & it will returne to his firſt colour and war faire againe as befoze.

To waſh a Scarlet which is greaſie.

Take of white Carter well and finely beaten, foure ounces: then boyle it in two pound of fayze water, till the third part be conſumed: then take it from the fyze, & let it cole, and then ſtraine it thzough a linnen cloth, and when you will vſe thereof, make it then milke warme & waſh therewith your cloth. Then hang it to dzy, and you ſhall ſee it fayze, and returne to his firſt eſtate and coloure againe.

To make all colours of ſilkes which be ſtained, to come to their firſt colour againe.

Firſt take one ounce of vnquenched lime, and of the aſhes of a vyne one ounce, alſo of aſhes of an oake one oūce & a halfe. Put all theſe into a baſon of cleare water, and meddle them all well togither, then heate them a

little ouer the fyre, and when it is warme, take it off the fyre, & let it clarifie a while, ſo done, then take a ſponge and waſh your ſtaine ſpottes therewith, and ſee that ye weat no other place, but the ſpottie places onely, and ſo they will be well againe.

To make a ſope to take foorth greace or other ſpots whatſoeuer they be.

Take one pound of roch Allom burned and made into a fine poulder. Alſo take of the rotes called ſlames of Florance (ſo cald in Duch) halfe a pound: then beate it into a poulder. Then take a new layd egge, & of white ſope two pound & a halfe, then blend your poulder and your egge & ſope altogether well, & thereof make pellots or bals, & if one egge be not ſufficient, then take two, or ſoe much as ſhall ſuffice to make your ſaid paſt withall, and when ye ſhall haue occaſion to take foorth any ſpotte take firſt of common water & waſh your ſpottes on both ſides withall warme, then take of the ſaid pellots, and rubbe all ouer the ſpots in the cloth: ſo done, then waſh out the filth with fayre & cleare water & if there remaine ſome part & be not all cleane, waſh it againe as afore is mentioned, till it be all cleane, & ſo ſhall ye haue it as faire as before.

Another good way to take footh ſpottes of greace out of any woollen or linnen.

Take firſt a little fayre water, all to wete and rubbe therewith the ſaid greacie ſpots. Then take a quantitye of walkers clays, called Fullers earth, and rub a little therewith your ſpottes all ouer. Then rubbe and chafe your

your cloth one vpon another, ſo done, take a ſiluer ſpoone or ſuch like thing, and ſcrape out the ſaid filthie water and greace, and if then it be not all cleane forth, doe ſo againe as before is mencioned, and then take a little warme water, & all to weat the ſayd place therwith ſo done. Then wring and ſcrape it forth as the other before. Being then cleane, let it be dried and it will be well.

To take away all ſpottes on coloured clothes, be they linnen or woollen.

If there chance by fortune, to fall a droppe of pyke, or any other ſtaine, vpon any cloth dyed or colored or being cleane white, woollen or linnen. Ye ſhall doe as hereafter followeth, that is: take of the iuyce of rawe Lymons, or the iuyce of a great Orang Apple, which hath a hard pill or ſkinne, which the Italian cals Pommes Dadam. Or if ye will take onely the egar or ſharpe iuyce which is in the Pouncitron, and ſtraine it forth thereof, and with the iuyce thereof ye ſhall all to rubbe and chaſe all the ſaid ſpottie places, and then waſh it with luke warme water, and ſo then ſcrape out all the filth thereof, with ſome ſpoone as aforeſaid, or wringe it cleane forth with your handes. If at the firſt time peraduenture it be not cleane, vſe it likewiſe againe the ſecond tyme, as before, and ſo your cloth will come vnto as good eſtate as it was at the firſt, nor this ſhall not hurt any colour thereof.

Another good way to make cleane ſpotts of greace, out of all woollen clothes.

Take an hearbe called wood ſorel or ſtubwort, which is greene, & groweth in woods in buſhes & ſtubs of old trees,

and hath three ſmall leaues lyke a heart, it taſteth ſharpe like other ſorrell. Which hearbe ye ſhall diſtill in a limbec, and ſo reſerue the diſtild water in a glaſſe very cloſe, and when you neede to take forth any ſpot of greace, the take of the diſtilde water, and rubbe therewith all ouer the ſaide ſpots. Then chafe your cloth one vpon another: ſo done, take a ſpoone, or ſome other lyke thing, and take away the ſaide filthy water therewith. Then if it be not all cleane, do it likewiſe againe as before, with the diſtilde water warmed, & then ye ſhall ſee it will doe well, and ſhew fayre and cleare as it was at the firſt.

Another good way to take out ſpots out of clothes with a lye.

Take 3. pintes of water, and put therein halfe a pound of pot-aſhes, and ſtirre it well altogether. Let it ſo ſtand the ſpace of foure dayes, but yee muſt in euerie day ſtirre it 3. or foure times. So done, powre forth the cleere water from the aſhes, and put off galles therein, then it will ware a greene: but if you will haue it a blacke, then put a little ſoote to ſoake in faire water, and put that blacke water therein. With this warmed, yee may waſh your ſpotty places in any place of your clothes, and it will take it forth faire and cleane.

To perfume cloathes.

Take a Violl of Roſe water, in the which ye ſhal put eightéen or 20. graines of Muſke and Ciuet, with a little of Ambergreaſe, then ſet all on the fire, and when it begins to war warme, take it from the fire, and let it cole, and ſtop it cloſe the ſpace of two dayes. And when ye will perfume your cloathes therewith, ſet it on the fire againe, and being warme, hold your Clothes ouer it,

it, and ſo it ſhall receiue the fume.

To take out ſpottes out of gownes and Clothes.

Take the rotes of Limonion cald in latine, in Engliſh I take it to be the wild Bete. Take the rotes, and ſeth them in water, and with the ſame water, waſh the ſpottie places in your gownes or other garments, and it wil bee cleane.

To make a ſope to take out ſpottes of oyle and of greace.

Take of good ſcowring ſope, and mire it finely with the ſifted aſhes of a byne, of eche in like portion, then put thereunto a quantitie of the powder of burnt Allom, and alſo of the lyes of wine, beaten into a fine poulder, and put it thereunto, then mire and incorporate all theſe well together, then make thereof ſquare brickes, or round bals, and when you ſhall haue nede to occupie thereof, then take of warme water, and rubbe and chafe all ouer your ſpottie places, and then rub theron with your ſope ball, if then it bee not all cleane, then muſt yee take your warme water againe, and rubbe and chafe it as yee did before, and then your ſope, and ſo at length ye ſhall haue it cleane forth.

A very good waie to take out ſpottes of oyle out of cloathes.

Firſt ye ſhall take of the oyle of Carter, and rub therwith on the ſpotty places, & then ſcrape it away incontinent againe, then waſh it well with luke warme water, and three or foure times with cold water, and then

wring it forth, and see if all the spots bee cleane out, if not, wash it againe, so long as you did before, and so the cloth shall be as faire as it was when it was new, or before any spots came on it. There is also another way for to take forth spots with this oyle of Tartar, but because I haue not the true knowlege thereof, I will not heare expresse it.

A sope water to take out all spots.

Also, some doe vse to take the water wherein strawberies haue beene sodde, and with that water ye shall weat and soake the spottye places, then take fayre water and washe out all the filth thereof: so done, take and hang it in the sunne to dry, and it will be so cleane as before it was.

A way to take out yron moles out of all linnen cloth.

Take and wring forth so much of the iuyce of ỹ sowrest Orange, or Lymon that ye can get, then take of the same iuyce, and rubbe the place of the yron mole therewith, so let it drye, and euer as it dryeth in, rubbe it ouer againe, thus doe often, and euer as you haue weat it, let it rest and drye in the sunne, and at length ye shall see it will bee all forth and cleane.

A way to take out spots in scarlet or veluet, of what color or sorte so euer it be, not chaunging the colours.

Take a hearbe (called of the Surgions) Saponaria, in frenche called Foullons, in English Sopewort, beat them oft, and take out the iuyce, and put thereof on the spottes, then

then let it ſo reſt the ſpace of one houre if it be in ſummer, but if it be in winter let it reſt foure houres, then waſh thoſe ſpotty places with faire cleane water, ſo ſhall it be cleane to ſeeme ſo, but put once againe the ſayd iuyce thereon. Alſo if the ſcarlet be not died in the cleare grain then ye may put thereunto halfe of blacke ſope, with ſo much of the ſayd iuyce, ſo mingle it together, and then frote it thereon, then let it be waſht in luke warme water, and then ye ſhall ſée the ſpots cleane forth. For this way is proued by experience to be true.

Another way to take out yron moles out of linnen.

Make a chafer ſéeth full of water, then take your cloth and wet it with the iuyce of Limons, or ſower Orenges, or crabbes, or ſower wildings, and then hold it hard to the ſide of the chafer, and euer as dryeth in, weat it ſtill againe, till yée ſée the moll go forth: for all theſe things aforeſayd are good, but the iuyce of Limons and Orenges are the beſt. So euer as ye haue weate your ſpottes with the ſayd iuyce, hold it then hard vnto the ſyde of the chafer, as is aforeſayd, thus doe vntill it weare away, for this way hath béen proued true often. Or take the boyling iuyce of Sorrell, and lay it therein, and rubbe it with the backe of a ſpoone till it be out.

How to take out oyle ſpottes out of parchment or writing paper.

Take a mutton bone and burne it to poulder, then let it be fine beaten, then put of this poulder on both ſides of your ſpots, and let it be preſt betwéene two hard bordes, the ſpace of two dayes, then take it out, and ye ſhal ſée the oyle to be cleane gone, be it either parchment or paper.

Another way to take out ſpottes of paper.

Ye ſhal take off the water of willow boughs, and make aſhes thereof, or aſhes of the buds of the vine, with the huſkes of greene beanes, ſteepe them in water a day and a night, then put of the ſame water on the ſpottes, then preſſe it, and let it ſo remaine for a day and a night, or as ye ſhall ſée cauſe, and ye ſhall ſée it will doe well.

A verie good way to take out ſpottes of clothes.

Take of the rootes of the hearbe called *Gentian*, in engliſh brome, take and burne of it, and make aſhes thereof, and with the aſhes make a lye, and with the ſaid lie, ye ſhall waſh your ſpotty clothes, and in a ſhort ſpace it will take away all the ſpots thereof. Well proued.

A good way to take out ſpottes out of woollen.

Take aſh water, and the powder of Allum together, then take of the aſhes thereof, and lay it vpon the ſpottie places on the cloth, and when it is drie: doe ſponge it off, and ye ſhall ſée it cleane.

Another againſt ſtaines in linnen cloth.

First take your cloth and rubbe it well all ouer with baye ſalt, then take an Orange and cutte it in two, and wring the iuyce thereon, and laye the ſayd Orange vpon the ſpots alſo: and ſo lette it reſt an howre or two, then

then lay them in a bucke and waſh them and they wil be faire and cleane. Or elſe ye may lay thereon the iuyce of ſorrell and ſalt, and ſo put them into the bucke as is afore ſayd.

A way to keepe ſilke from ſtayning in the waſhing.

Take faire water and ſæth it, and being all ſæthing hote, put therevnto of ſope and let it ſo melt therein, then take it from the fire, and let it cole til it be almoſt colde, and then at your pleaſure yé may waſh therewith your clothes, and it will ſcoure well, and not ſtaine your ſilke, and after ye haue waſht them, doe not let them lye weat long together, but lay drie clothes betwéne, or elſe they be in danger to ſtayne: and this way you may ſaue both Silke and Gould without chaunging of their colour.

Another verie good way to keepe Gold from ſtayning.

Firſt, take your Gould and annoint it all ouer with good Vonie, then ſette it in the Sunne, and lette it reſt the ſpace of halfe an houre, and nowe and then lette it bée turned in the Sunne. Then after take and waſh it in the foreſayd ſopie water, and this way it ſhall neuer chaunge nor ſtayne, but kéepe colour long.

How to bucke linnen clothes, and to ſcoure out all ſpottes of greace.

Firſt, yé ſhall lay all your fowle clothes to ſoke

in cold water, then driue them as yée doe a Bucke of clothes, and when they are well driuen: then shall yée take them all forth of the Bucking tubbe, then lay them againe abroad in the sayd tubbe, without any lye, and euer as ye lay them betwixt euerie cloth, scrape of chalke thinne all ouer: thus when ye haue all layd them, then put of your lye vnto them, and so chaunge your lye twise or thrise after, then take and wash them forth, and they will be faire and cleane without greace, and verie white withall.

A good way to keepe linnen faire 20. yeares without remooving, and will not waxe moulye nor rotte.

First take your linnen in March (so much as you intend to kéepe vnremoued) and wash them, and then dry them fayre againe. So lay them vp in your Chests vntill May next following: then shall ye take them out and wash them againe; when ye haue so washt them, loke that ye doe then dry̆e them thorowly and well, and then fold them faire vp, and lay them in your Chests or presse, and yée shall not néede for to remoue them in twentie yeares after, yet they shall continue dry̆e and well.

How to sponge woollen clothes.

Take a quart of faire water, and let it be heat luke warme on the fire, then take a quantitie of walkers clay and all to crush it therin, then let it stand vntil it be clere, then poure that water into another potte and set it on the fire againe, till it begin to séeth: then take of Venice sope, or other good sope, and put thereof into the sayd water, in stirring it well all about, then take it of the fire, and

and all hote, ſponge or occupie therewith at your pleaſure, in making it alwayes warme, euer when yée will occupie thereof.

How to make crane colour Fuſtian, to be as fayre canuaſſe as at the firſt.

Firſt for the prooſe thereof, take a péece of crane colour Fuſtian, and take alſo as much of the iuyce of Orenges, or Limons as will weat the ſayd péce thorowe, then let it reſt and drie in, and the ſaid Fuſtian wil be as faire canuas as it was before it was coloured: thus if yé can get ſo much iuyce of Organes or Limons for to ſerue your purpoſe, yé may returne the colour againe, what quantitie yé ſhall thinke good, for this hath béene well proued.

Thinges to keepe moaths from clothes, verie good in ſummer and other times.

The flying moathes will bée in the beginning of June, and continue till Auguſt, but they are chiefly from mid July to mid Auguſt. The running moath hee will continue in your Cheſts all the yeare long, winter and ſummer, which are great ſpoylers of geare and other thinges. For the flying moughth, take the ponder made of drie Orange Pilles, and the powder of Elecompane rotes mixt together, and ſo caſt it among your cloths, alſo perfume in a chafingdiſh of coales your clothes therewith. Thus you may vſe quarterly, and it will ſaue thē. Or ye may take the powder of Arras, with the powder of Ginoper, alſo the powder of ſitrinum caſt among clothes, ſaues them from moathes. Wormewood or Lauendar ſmall preuayleth. Some vſeth oyle of ſpike to annoint their Cheſts, and hang it in bladders therein. Some laies

the hearbe called Fleawort, in Latin *pulicaris*, which if ye lay it in your chamber, no flea will breede, some takes brimstone, and perfumes therewith, but for the running moath I know nothing but strong perfuming, and remouing your geare.

A way for to take out spottes of wollen clothes.

Take and seeth of common ashes in faire water, and the powder of Allom together, and then take of the sayd ashes and lay thereof on the spots and so rubbe it in, then let it drie, and when it is thoroughly dryed, then take a sponge and sponge it away, as it is declared of the other afore.

A good way to helpe all staynes in thinne silkes and woollen cloth.

Take of good strong vineger, and make it luke warme, then dip a blacke cloth therein, and then rubbe therewith your staynie spottes all ouer: so done, then take away so much of the sayd filth as ye can with a spoone, as for the rest, ye must haue all readie a taylors yron hote, and a peece of blacke cloth on the spottes betwirt the yron and the cloth, and so drie out all the rest of the sayd filth with the hote yron, and then ye shall see it will doe well and be faire.

A pleasant water to preserue linnen, or any other thing, yeelding a pleasannt sauour a long time after.

Take 2. pound of spike flowers, as much of rose leaues one pound of cost-mary, with halfe a pound of marioram.

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as much of Balnea, two great handfull of Organy or penirpall, foure ounces of mace, a quarter of a pound of Arras poulder, let all theſe well ſoke together in red wine, then put it all into a pot cloſe ſtopt that the ayre doe not paſſe. Let it ſtand ſo the ſpace of foure and twentie houres, then let it be put into a diſtillitorie, and ſee that it bee well ſtopt (round about) with flowre, egges, and water, mixt well together, and ſee that no ayre doe come nor goe out, but at the ſpoute onely. Vppon the end thereof, ye ſhall hange a fine linnen cloth with a graine of muſke or Ambergreace within it, vppon the which ye ſhall alwaies let the ſpout drop on, and yee ſhall ſee it will be a pure water for that purpoſe, ye ſhall alſo take to the diſtilling of the foreſayd things, halfe a pound of bayeleaues, ſo ſhall this water be good for the purpoſe as is afore mentioned.

A good way to waſhe a ſhirt, and ſaue the Gold or ſilke thereon, from ſtayning.

Take a new ſhirt firſt of all afore it bee euer weat, and lay the coller and ruffes of ſilke in piſſe ſomewhat warme halfe an houre ſpace, then take it forth, and then waſh it in hote ſcalding liquor, or ſeeth it, and it ſhall neuer ſtayne the ſilke. If ye haue not piſſe, yee may take grounds of ſtrong beere or ale, and let the ſilke lye therin the night before ye doe waſh it. And this hath been oft proued verie true. But alwayes ye muſt foreſee, that ye hange not your clothes in the hote ſunne after they be waſht, but laye another cloth thereon betwixt the Sunne and it, or elſe the Sunne will chaunge both Golde, Siluer and Silke. Therefore it is better

to

to hang them in some place of shade after their washing, if ye can. Also to sope your water to much, or your clothes is an occasion to staine both gold and silkes. A verie good way is, first to melt your sope in the licour, and then let it coole, and so to wash your clothes therein.

Against clothes stained with wine or vineger.

Take of warme Cow milke and wash your cloth therin, or wash it in whay and salt, other else as sone as your clothes are so staynde by mischaunce of wine or other thinges, doe cast of salt thereon incontinent, so then it will preserue it from stayning, whether it bee wollen or linnen.

A verie good way to take forth waxe or rosin dropt on silke, wollen, or linnen.

Whereas ye shall haue any such occasion to take forth waxe or Rosine dropt on any silkes, or other clothes. First ye shall make a pressing yron hote, or some siluer spone, with a cole of fire therein, take either of them when they be hote, and first whereas any Rosin or waxe is dropt, ye shall first rubbe on the sayd droppes of waxe or rosin all ouer with the end of a tallow candle, thē take either your yron or spone aforesayd, and hold it thereon, laying a pæce of browne paper betwixt your yron and your war, then after yæ haue a little so touched it with the heate, (the ware and tallow will mingle together, and soke into the browne paper) then take it off, and annoint it with the sayd tallow againe, and then hold your hote yron, or spone, as before, and thus ye must doe, as often as ye shal sæ cause, vntill it be all cleane forth. If the ware be dropt thorow on both sides, vse the one side like the other, and so ye

ye ſhall get it cleane: and loke euer that ye ſhift your browne paper to a cleaner place, from the place it was before touched with war, and this order kæping, it ſhall be all well and cleane. Often proued.

A ſope to take out all ſpottes in woollen cloth.

Take of Venice ſope a quarter of a pound, the yolkes of three egges, of ſalt finely beaten halfe a ſpoonefull, of the iuyce of Bætes halfe a ſpoonefull, or as much as will make it thicke like a paſte, then make them into pretty balles, and let them drie out of the heate of the ſunne, in ſome ſhadow place, and whenſoeuer ye will occupy therof, firſt wet your ſpottes thorow with faire clære water, and then take your ball and rubbe it thereon, and waſh it then clean forth as is afore mentioned of the other, thus doe, and yæ ſhall ſæ that they ſhall be cleane forth, as before.

*A*nother for the ſame.

Firſt ye ſhall take of white ſope halfe a pound, and ſhread it verie ſmall, then take of the gall of an Ore, or of a hæ Goat, with ſome Allum, of either of them an ounce, take the yolkes of two egges, with a quantitie of fine ſifted aſhes, put them altogether in a morter and beat them, and when they be well mixt, make them into balles, and whenſoeuer ye ſhall næde thereof, take of faire warme water, and rubbe the place all ouer therewith, and then ſtrike with your ball thereon, and then ſhall yee rubbe cloth vpon cloth, and waſh it then forth, as afore ſayd, and it will be cleane.

Another way good to helpe ſpottes or ſtaynes.

Ye ſhall firſt take halfe a gall of an Ore, the older the better, of fenygreke made in fine powder halfe a pound, a quarter of a pound of white ſope, a gallon of ſtrong common lye, mire altogether therein, and ſet them on the fire, and ſæth them ſoftly till they be halfe waſted, and whenſoeuer ye will occupie thereof, heate it warme, and waſh your ſpots therewith, in mixing it often with faire cold water, and it ſhall doe well.

How to take out ſpots of white ſilkes, or other colours.

Take of the beſt and ſtrongeſt Aquauite thrée pintes, with the which you ſhal weat your ſpots, and take a new layd egge and beat it, and rubbe thereon your ſaid ſpots. and ſo ſet in the ſunne and let it drie in: this done, waſh it then with a freſh and clære water, and then wring or preſſe the ſayd water forth, or preſſe it betwirt your hands and ſo they ſhall be cleane, as for cloth in grayne, ye may waſh the ſpots well with Allom water, then rub cloth vnto cloth, and ſo waſh it forth with cleane water againe, and it will be well. If it bæ not at the firſt all cleane out: doe ſo likewiſe againe, ſo long as ye ſhall ſée cauſe of any ſpots remaine, and ſo they ſhall be well.

A prooued way how to take out oylie ſpots out of cloth.

Take of the ople of Tartar ſo much as will couer your other ſtaynes, and put it thereon, and ſtraight way take it off againe, and waſh it then well with faire warme water.

water. Then take cold water alſo and waſh it 3. or foure times ouer, after that, in changing it ſtill with new water, this done, you ſhal ſee it will be as faire as the reſt, and as it was before.

Another way to take out all waxe, Roſin or pitch, on Silkes or other clothes.

Firſt take of tallow or other greace (be it ſalt or freſh) and melt it, and being ſething hott put thereof on your ſayd ſpots of Waxe, Roſine, or Pitch, then take of hot licour, and hold your ſayd ſpots therein, and then rubbe cloth vpon cloth, betwixt your handes. So done, then wring forth the ſayd greazie water, and if ye then ſee it will not be all cleane forth, ſerue it ſo againe, annointing your ſayd ſpottes with tallow or greace, and then doe cleanſe forth the greazie water as before is mentioned. For this way hath bene wel and often proued, and doth helpe.

To take forth greace out of Silke, Veluet, Moccado or others.

Take and heat water and put a handful of cleane feathers therein, and then let it cole tilye may ſuffer your hand therein, and lay your ſilke abroad, and take your feathers and rub al ouer the ſpot, then rub therouer with Caſtile ſope, and then with your feathers again al vp and down, weating them twiſe or thriſe, and ſo rub it vp and downe, then wring it a little and drie it in the ſunne or wind: but if it be Veluet, after ye haue ſo rubbed it: the Veluet will lye, then muſt ye take a cloth of woollen, and heat it, then annoint it light ouer with butter, and chaſe your cloth together, to rub in that butter, then heate it a little, and rub your veluet vp and downe therewith, and it will then riſe againe, and be as faire as before.

To take out ſpottes of cloth.

They take the ſtraight bones in ſhæpes fæte that are ſodde, and dɔie them and make them into poulder, with the which you ſhall lay on the ſpotted cloth layd in the Sunne, and rubbe this poulder thereon till it goe all ſɔith.

To dye woolled red.

Ye ſhall put to foure pound of woollen yarne, tenne ounces of Allom, and ſæth it with bɔanne water ſo much as ye ſhall thinke good, then take your yarne out, and put that water out of that Kettle, and put therein againe thɔæ parts of freſh bɔanne water, and one part of faire clære water, and warme it a little on the fire, then put therein two pound of grening wœde, and let it ſo warme a while, then put therin your woll, and ſtirre it wel with a ſticke the ſpace of thɔæ houres, but let it not ſæth in any wiſe, ſo done, then take out your woll againe, and put it againe into your Kettle, and put thereto halfe a glaſſe full of vnſleakt lime, with as much of common aſhes, and thereto put your woll againe, and ſtirre it with a ſtaffe fire oɔ ſeuen Paternoſter whiles, than take fɔith your woll, and ye ſhall haue a faire colour. But if yæ will haue it yet a mɔie ſanguine colour, then muſt you put into your Kettle halfe a little glaſſe full of mɔie lime, and a little glaſſe full of common aſhes, and thereto put your woll againe, and ſtirre it well ſtill foure oɔ fiue Paternoſter whiles, then take fɔith your wooll and waſh it, and ſo ye ſhall haue a verie faire colour.

Another way to make wooll a faire red.

When

When as your wool is made red after the firſt maner, then ſhall ye caſt away that licour that is in the bottle, and put into it faire water, and put thereto the cruſe full of faire made lye of common aſhes, and therein put alſo an ounce of Allom, then aſſone as it beginneth to ſæth, put therein your woll, and ſtirre it well therein foure or fiue ſeuer noſter whiles, then take it forth and waſh it, and ſo you ſhall haue your wooll a faire colour. This maner of dying is after the order of Doyncke in Flaunders.

To dye a faire yealowe.

If ye will dye yealow with wood, take off the wood leaues, and cut off the rootes, then cut them in peces, and lay them to ſoke in lye of comon aſhes three houres, then ſæth it a quarter of an houre, till ye thinke it be meately well ſodde. Then put therein two quarts of water, and as much ſtale Vrine of fiue dayes old at the leaſt, ſo let them ſæth together a little, then cleanſe it thorow a ſiue, and then put vnto the ſame againe of lye and Vrine as aforeſayd. Then ſtraine it thorow a faire cloth and ſæth it, and to two pound of wood take two pound of Verdegreace, with the lye that ye haue ſod, your wood and al, putting them in your ſayd colour, which muſt be medled and well ſtirred all together. Then ſhall ye boyle it all a little, and it ſhall be well.

Another colour to dye a yealow with wood.

Take and ſet a pot with water on the fire, and make it warme, then take aſhes made of Oken wood, and caſt thereof into the pot with water, and being warme take it from the fire, and ſtirre it well. Then couer it cloſe till the

nert day. Then poure the cleareſt lye thereof thorow a cloth ſoftly into another veſſell or pan, then take of good wood, and breake the rootes off, and then cut them ſmall, then waſh and rince them in cold water, & then put them into the lie, and there let them ſoke a night, then take and ſeeth it, till the halfe be conſumed, and when it is wel ſod, then all hot cleanſe it thorow a faire cloth, then muſt yee haue of verdegreace wel and finely beaten into powder, and blend therof with a ſpoone amongſt your other ſtuffe, this muſt be done incontinent thereupon, and alſo your lye thereunto muſt be verie ſtrong made.

How to dye linnen or thread redde.

As when ye will dye any Linnen or thread redde, yée ſhall take one pound of ſamfleure, and let it ſoke halfe a day and a night in water milke warme, then put it into a thicke bagge or ſacke, and therein waſh and rince it in the riuer till the bagge bée therewith red, then wring the water well forth, and ſo take out your Samfleure, and ſpread it vppon a faire bord or Table and make (as it were) a little thinne bedde thereof, then ſtrew thereon of white aſhes, in making beddes of your Samfleure, and when ye haue ſtrewed them with aſhes, ye ſhall take to one pound of Samfleure, a quarter of a pound of aſhes, which aſhes muſt be burnt and made of the lyes of white Wine, and it muſt be wel chaft betwixt your handes, the one againſt the other, then make thereof a ſmall heape, and ſo let it reſt the ſpace of fiue houres. Then ſhal yee rubbe it againe til it ware warme, then haue readie a faire baſon, and ſette it vnder your ſtuffe, that it may runne therein, and alſo wring out the iuyce thereof into the ſayd baſon. Then caſt therein a pinte of wine vineger that is verie good, then yee may put therein a pounde of yarne, and it ſhal doe wel. But

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to dye your Linnen cloth, ye ſhall put it in before your yarne or Fuſtian. Then lay it therein a day and a night, then take forth your linnen or yarne, and then put therein a gallon of aſhes of the Aſhe tree, and thereunto your linnen, yarne or fuſtian, and ſo let it lye therein halfe an houre, then take it out and wring it as well as you can, then by and by hang it in the ſunne, then take that water that ye ſoked firſt your Samſleure in, and ſtrayne it (as aforeſayd) into the baſon vnto the other colour, then put therein a glaſſefull of Vineger, and then you may put therein your yarne, fuſtian, or linnen cloth, and doe therevnto as is aforeſayd.

Another way to dye Linnen in a faire roſe redde colour.

To dye a faire redde Roſe colour of Linnen, ye ſhall take to euerie iiii. yards and a halfe of Linnen, halfe a li. of good gall nots, and ſeeth them in faire water all whole, the ſpace of 2. houres, then take it from the fire, & poure that water into another veſſell or fatte, then put your linnen into the ſayd water, and let it ſoke therein the ſpace of foure houres, then take it forth and wring the licour well forth. Then take faire water in a kettle, and ſet it on the fire, and put therein a quarter of a pound of Allom, and when it is readie to ſeeth, take it from the fire, and put your cloth therein as ſoone as ye haue wrong and ſtrayned out your gals aforeſayde, but lette it lye a night before firſt, and then turne it well therein the ſpace of a quarter of an houre. So take it forth and wring it well, & then ſeeth two ounces of Brazill in faire water, the ſpace of two houres, then take that frō the fire, and hange another kettle ouer the fire, and put therein grays water, ſo warme it a little, and caſt therein two li. of grening wede, then put your linnen cloth therein, and

lome that no Allom haue beene in that water. Then let it lye therin halfe an houre, and ſtirre it wel with a ſtaffe and then take out therof the ſaid linnen, ye may then caſt away the ſame liquor, and waſh your kettle cleane, and put therein of the cleareſt braſill water, and let it wel colour therein. Then take your Linnen and waſh it wel in faire water, then take of faire water in a panne, with a little Allom and ſo ſeeth them both together: and therein ſeeth your linnen cloth fiue or ſixe Pater noſter whiles. Then take out the ſayd cloth and wring it well, and after that put the ſayd cloth into the kettle of braſill water, and therin ye ſhal turne and winde it wel, the ſpace of a quarter of an houre, then take it forth and wring it a little, and in like wiſe you ſhall do with the dying of Fuſtian, but vnto your Fuſtian you muſt haue two parts more of Verdigreace and Allom, and that your Fuſtian muſt lye therin halfe a day and a night, then wring it forth, and let it drie, then after yee may rayſe his cotton with cardes meete for that purpoſe: if ye will haue your Linnen more fairer, caſt into the kettle with your ſayd braſill, ſome lye made of white Lime, then put your cloth therein, then turne and wind it therein the ſpace of foure pater noſters, and then take it forth thereof and wring it well, and ſo hange it vp to drie.

How to make your branne water, wherewithall you ſhall vſe to dye red.

Ye ſhall take a hat full of wheat branne, and take ſo much water as will go into the ſmal kettles, ſo let it haue a welling or two on the fire. Then poure it into a fatte, then take two other kettle fuls of water and warme it, and put it therein alſo, but firſt ſtirre it well, and ſo couer it wel. The firſt day you muſt ſtirre it often, and then it will be the better, then ſhall ye let it ſtand foure or fiue

dayes

dayes till it waxe the riper, and which will be the better for your purpoſe, and then ye may occupie as yee ſhall ſee cauſe.

For an yron moll in Linnen.

To take foorthwith yron moll in linnen cloth, take a chafing diſh with coles, then couer the coles with a pewter diſh, ſo let it be hote. Then lay your linnen thereon where the moll is, and with a Limon, or an Orange, but the Limon is better, to rubbe your moll therewith, and ſtill as it dryeth in, lay the lynes thereon, and ſtill rubbe it ſo till it be al cleane, and this way will haue it all out. Mit pzoued.

To dye ſilke quoyues in a red.

Ye ſhall firſt lay your ſilke in Allom water, and let it ſeeth therein, and with brazile water alſo halfe an houre long both together, then take a little grœning wœde, and the like of brazile water, and let be made hot, and put the ſilke therein, but let it not ſeeth, but take it out and rince it in lye, and then in water, and then it will be faire and woll.

To dye ſilke in a ſanguine colour.

Ye ſhall dye ſilke in a ſanguine, as ye muſt in all ſorts, take Allom as ye doe grening wœde, then muſt yee take a little faire water, with a little brazill, and ſeeth them together. Then take part thereof, and ſeeth the ſilke therein, and as that is taken out, ſo take another, and then the third time, & then put it in lye, and clenſe it, as is afore ſayd.

To dye Silke blew.

If ye wil dye blew silke, that silke must then be white, which ye must first soke in water, and thē wring it forth, then ye shall put it in your blew dye, and there ye may make it with a light colour or darker as ye please.

A faire greene cloth.

If ye will haue a faire grēne, take a little brasse water, and a little allom, and seth them together, and when the Allom is molten, put your silke therein, and let it seth the fourth part of an houre. Then take againe a little bran water, and a little wood, and put it therein also, till that it ware a faire darke yealow. If ye will haue it more yealower, then put it in the blew dye, wherein yē may make it light or darke as ye please.

To dye blacke Silke.

Take to one pound of silke, 12. gall nuts, and beat them to powder, then seth the silke with the gals in faire water, a good halfe houre long, then take of the blacke dye, and therein seth it another halfe houre, then take it forth and let it be cold, and then put it againe into the blacke dye, and let it there seth another halfe houre, if then it be not faire: let it seth therein so long till it ware a faire blacke, then sponge it in the water, and so let it drie.

A purple silke to dye.

When ye wil die a purple silk, ye shall take to one poūd of silke, 4. ounces of Allom, and seth the Allom in common water, and lay the silke therein, and let it so lye foure houres

houres. Then take to euerie pound of ſilke, two pound of purple colour, & ſeeth it together as hereafter is written, which is, ye ſhall take halfe piſſe, and halfe water together, and ſeeth it therein till it waxe clers and faire, and then ſponge it in faire water. Alſo to each pound of ſilke it behoueth to haue foure ounces of Allom. Alſo for red ſilke to dye with crap die, ſo called in dutch, which ye ſhal dye with foure pound of Allom, and alſo ye ſhall dye ſangoine ſilke with allom, and alſo ye alow ye ſhall die with allom.

To make a good blacke dye.

Take a pound of galles, and ¼ fourth part of coperas, and ſeeth theſe together, then put the cloth therein, and ſtirre it wel about, then hang it to drie, then prepare your dye as thus, take a god great fat, and put therin a fourth part of Rye meale, and halfe ſo much of ſwarfe (of the grindſtone, and ſo much of Elder barke, and in like of old yron, & the ſcales of yron, as it comes off by the hammer heating, ſtirre this all wel together, and ſo let it ſtand three dayes or euer ye put your cloth therein, and at each time let your linnen drie afore ye put it therein.

To dye a greene.

Take a light blew colour and put it into allom water two houres long, then hange it to the time there as the winde may drie it, and then put it into the forreſayd wood and ſo vſe it as it is afore declared.

To dye a Carnation.

Take purper that is drie, and lay it to ſoke a night in piſſe, then take your cloth that is allomed and drie, & put

it therein, but ye shall seeth the purper twise in faire water, then set another fatte by the fire, and let it seeth, and therein ye shall first put your cloth, and then all weate put it into your dye, till it be faire ynough.

To make a redde carnation.

To make a redde carnation die, ye must die your white cloth, linnen or woollen, or silke yarne, to doe it well, ye shall gall and allom it well. Ye must take an hearbe called Foli in dutch, that shall ye finde by ditches & bankes, take a pound thereof that is drie, this is in tuftes, and it is hote like wee-ashes, and carnation in sight, therewith men doe make a redde carnation woollen cloth, with the greene or white, or of silke, and if any carnation haue lost his colour, or if any carnation haue lost his die, with that ye shall die it againe, that it shall not lose his colour, and to foure elles of cloth, ye shall take a pound grais, or of that hearbe afore named, which ye shal beate to powder, Then shall ye take lye made of Oke ashes, more a part therewith, and another part of claire pisse claire and old, of each like much. If ye will haue a light die, take pisse new made, and of the foresayd lye in like much, & therewith ye shall die, with the foresayd poulder put therein, and as it is sod, put in that which ye would die, and seeth it two houres long, and then let it drie.

To dye Linnen.

Ye shall first take to one stone of flockes fiue pound of sope ashes (which are called in Dutch Wee Asseen) of the best, with sixteene gallons of water, seeth it together an houre long, and then let it cleare one night, then gently poure of the vppermost thereof, and seeth your flockes therein one houre long, and then proue if your flockes

or ſilke be ynough ſod, alſo take a little of your Flockes in your hand, and thruſt it hard to a redde cloth, alſo put thim your mouth, and if it goe by and by apart like a ripe apple, then it is ynough ſod. Then ſponge it in faire water, and then put it in braune water, according to the quantitie of the woollen cloth, and ſæth your Flockes therein, then put it out thereof, and take braſill and put it in water according to the quantitie of the linnen, that is to each elle of cloth foure ounces of Braſill, and as the braſil hath ſod a while, then ſtrayne the braſil thorow a cloth, and put it again into your kettle, and your Flocks alſo, and let them ſæth, then take a Ladle ful of lye and put it therein, thus ſhal ye make it as hye as you wil, and if ye will haue it more higher, then put more lye therein, alſo for thrée pound of Flockes, take foure ounces of Allom, and ſæth them together, and if ye wil ſæth dyed Flockes, take lye of Sope aſhes, as before it is written which ye ſhall ſæth with Sope aſhes, then ſcoure it, and let it date.

To dye cloth with facet wood.

As ye will dye cloth with facet Wood, ye muſt make your lye with Sope aſhes of Denmarke, and raine water, which ye ſhall let ſtand thrée houres long, then ſæth it, but the wood muſt be firſt ſod in the lye, and when it is ſodde, let it bee coled with other colder and ſharper lye, with the laſt lye yee ſhall put two one pund of yarne, a great peece of allom, and put it therein. Then ſhal ye put that lye into a faire kettle or fatte, then take two ounces of Spanith grene, that ye ſhal ſoke therein two or thrée houres long, then tolle and puſh it up and down twiſe or thriſe, and wring it, and with colder lye put therein, and tolle it with a diſh to and fro. Alſo another manner

is, take a dish full of vnslett lyme, and quench it with water, then take two dish full of wood ashes, and mixe it with the chalke all together well, and thereof ye shall make a good strong lye, and let it thre or foure times run thorow the tubbe, then take the saucet wood, and hew or cut it in small peeces, & cast it into the lye, and let it seeth therein halfe an houre long. Then put therein sope ashes, and let it seeth another good halfe houre, take it then off, & put thereto spanish greene, & let it boyle twise or thrise, and then sponge it, also with thre pound of saucet wood, it behoueth to haue two ounces of spanish greene, & as the cloth hath been in the first licor, if then it be too browne or too yealow, then put therto of wine ashes, & a litle allom.

To dye woollen cloth sanguine.

To dye woollen cloth faire, ye shall first seeth good rye meale in faire water, and then put it in a faire tubbe or pan. Then cast faire water thereon, and let it so stand thre dayes to cleere, then take of that water, & put therein two ounces of allom, to an elle of cloth, and let it seeth two houres long, then let it hang and cole without wringing. Then put that water forth of the vessell with the meale, and put therein a pound of the best grening weed, and heat that also, but let it not seeth, then put your cloth therein, & tosse it wel with your hands without seething, and take it forth and put it in a panne with faire lye, and let it lye therein, and so let it dye, and it wil be a red. If ye will make fairer, you must haue of brasill, take an ounce of Allom and allom it as afore sayd in another water, then seeth two ounces of Allom with that brasill, in brasme water made, and as the brasill hath sod a while therein, so put therein of cold water, then take so much thereof out as will weat your cloth in, and stirre it well therein then shall ye take of other die, vntill the time that

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it hath ſufficient ynough, if yée will haue the ſame a ſanguine, lay it in faire lye of Sope aſhes, and there it will haue a faire ſanguine die.

To dye woollen yarne, or cloth.

To make this dye, put to foure pound of woollen yarne or cloth, two pound of woad. Put this woad in a kettle, and caſt therein of faire water, then caſt againe halfe a tin diſh full of aſhes out of the fire, and as ſone as it ſæthes, put your woollen yarne therein, then let it ſæth eight or nine Pater noſter whiles long, then put your yarne forth, & put a little water in out of the kettle, and then a few aſhes out of the harth, and put your woollen yarne againe therein: and ſo let it ſæth a good while, if it be a browne blew, it ſhall be a darke græn, and if it be white woollen yarne, ſo it ſhalbe a yealow colour.

Againe to dyé woolen yarne.

As ye will dye woollen yarne that is græne, your yarne yee ſhall firſt ſæth in braune water, which is to underſtand, to foure pound of yarne, ten ounces of allom, and let it ſæth two houres, then wring that out, and put it in the dye thus made. To foure pound of woll yarne take two pound of woad, and ſæth the woad well with beare aſhes, in lye made a day before, ſo let it ſæth the fourth part of an houre, then put the cléere into a cleane fatte or veſſell, then take the fourth part of an ounce of ſpaniſh græne, called Verdigreace, poulder it well & caſt it therein, and ſtirre it with a ſticke or ſtaffe, then put in your yarne, ſo turne and tolle it therein the fourth part of an houer, and then let it dyie. If it bée not faire ynough, then put it in againe, and doe as before.

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also as ye would dye blew woollen yarne, ye shall put it first in warme water, then wring it softly and dye it blew, as it is aforesayd.

To dye with brasill as red as a Rose.

Take fire elles of linnen, and thereto halfe a pound of beaten galles of the best: then put it in faire water, and let it seeth about two houres, but the galles should rather be all whole, and when they are sodde, set it from the fire, and put it gently in another kettle or fatte, and then put your linnen therein, as hote as you may handle it, and stirre it therein foure houres long, that done, then wring it well forth, and hang it to drie. Then take foure ounces of Allom, and seeth it with water, and when it is sod, take it from the fire, and put your galled cloth therein, as hote as ye may suffer it, the space of a quarter of an houre, then take your braune water and put thereof in a kettle, and as it is warme, put therin two pound of greening woade, let it the first time soke well therein, and let it be well and hote, but not seeth, and then put your cloth therein, and stir and handle it well at the first with your handes, nye halfe an houre with a staffe toss well about, and wel handled in the die, and then ye shall take your cloth, and sponge it in water and wash it cleane. Then take a little Allom, and seeth it with water, then shall ye haue two ounces of brasill sodde in light water, and put your cloth therein, fiue pater nosters long. Then shall ye haue two ounces of brasill sodde in light water, and put your cloth therein, then handle and stirre it well therein, and stirre it well about the space of a quarter of an houre, and wring it not too sore, then drie it. Then if it be not drie ynough, then weat it as before is sayd.

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How to make a greene water.

Take nye halfe an ounce of Verdigreace, and cruſh it well in a woodden diſh, then put thereto the yolke of an egge and two blades of ſafferon, then take of the leaues of ſpurge halfe a handfull, and beate them in a morter, and thereto caſt a good glaſſefull of Vineger, and ſtrayne it thorow a cloth. Then take of this ſtuffe, and put thereof in a diſh with the Verdigreace, and ſtirre it well together and make it thinne, that it may be the better to dye, or to worke with a penſill, or as ye ſhall thinke beſt.

To dye faire linnen with braſill.

Ye ſhall take faire water, and heate it ouer the fire, then ſhall ye haue the powder of galles, and put thereof into the Kettle ouer the fire, and ſo let it ſæth a quarter of an howre: then take it from the fire, and take another veſſell and put therein ſo much cold water, as of the other in the Kettle, and put that hote in the Kettle thereunto. Then put your cloth therein, and ſtirre it well vp and downe therein, and as ye haue done ſo a while, then let it lye therein foure houres long in that gall water, then take your Kettle againe with other faire water, and ſet it ouer the fire and make it hote, then put allom therein to the Kettle ouer the fire, and as that water is hot, and the allom melted, ye muſt then haue another veſſell or fatte with cold water, as much as of the other hote water, and put the Allom water therein, then put your cloth therein, and ſtirre it as aforeſayd, and ſo let it then lye therein foure houres long, ſo done, then ye ſhall wring it out and hange it to drie, or to drie in the ayre, but let it not bee to drie. Then ſhall ye take your braſill made in powder, and put it in the panne, and ſo let

it ſæth therein, the quarter of an houre, and before that brafill doe ſæth, ye ſhall take wheat flower, & put therein, myre it all together well in a diſh, and put it into the kettle before it doe ſæth: thus done, let it ſæth, and as it hath ſod, then take forth ſo much of the brafil, as ye may put in your cloth, and ſtirre it well about, as is afore declared, thus done, let your cloth reſt therein a good while, then wring it forth, and hang it to dry, & as it is dry, ye ſhall take that liquor that it hath layne in, and put that away, then take againe ſo much brafill as before, and put that cloth therein againe, and then hange it to drie, and as it is drie, then put it in another licor, and hang it againe to drie, and then it is full done. And to know the quantitie of weight, which is, to euerie elle of linnen cloth, ye ſhall take a lot of gall powder ſo called in Dutch, & as much of allom, and to each elle of cloth one ounce of brafill.

To make a faire yealowe.

To make a yealow, that ye may worke with oyle, or water, ye ſhal take woad, ſo much as ye ſhall pleaſe, and let it ſtand to ſoke a night and a day in lye made of ſoape aſhes, & when it is thus ſoked, then ſhall ye ſæth it, & couer it cloſe ſo long as it ſæth, thus done, then ſet it from the fire, & put that liquor into another pan, & ſo ſtraine it thorough a clean cloth, then take the pan and poure the thinneſt above off, ſo long till ye ſee the die vndercome with al, then take the foreſayd cloth, & ſtraine it againe thorow it, into another pan ſo long as ye thinke the ſubſtance of the woad doe tarie in the cloth, til ye thinke that that water is thin enough to ſtaine, and then ye may vſe it.

A faire linnen cloth to dye blewe.

For to dye a faire blew, ye ſhal take a pan of faire water,

ter, and hang it ouer the fire, & let it be ſæthing hot, then muſt ye haue a veſſell of halfe an Ame, ſo cald in dutch, or thereabout, & as your licor is hot, put thereto 3. pound of wheat bran, & 3. pound of aſhes, and a pound of græning wæde, ſtir al this in the pan, & let it ſæth 3. or 4. paternoſters long, thẽ take of floray vnder halfe a pound, & ſoke it in faire water, & let it there reſt a quarter of an houre couered, then take your clean veſſel or Ame & therein put your ſoked floray, then take the hot licor ouer the fire, but let it cole ere ye put it into the fatte, then put it in and ſtirre it well, & ſo couer it wel and cloſe, and let it ſo reſt fiue houres long, then vncouer it & ſtirre it well about a good while, then couer it cloſe againe, & let it reſt other v. houres, thẽ vncouer it & ſtir it as before, & ſo ſtop it again, then vncouer it within 2. or 3. houres, and loke if the die begin to come, or begin to wax græne, if they doe not, let it reſt longer and ſtoppe it cloſe, if ye ſæ it be come, put therein ſome of your cloth that ye would die, and turne it well therein, then wring it out, and let it reſt 2. or 3. houres: then put in again your cloth, & vſe it as aforeſayd, and ſo ſtop it wel again, and let it reſt ſo 2. or 3. houres, till ye ſhall ſæ the dye begin to come, and the flower to lye aboue, & to euerie going that ye goe thereto, ſæ if the colour be græn ynough, or wax græn, and when ye ſhall ſæ it ſo, ye ſhal ſcom off the flower with a diſh, and then put your cloth again therein, ſtirre it wel, and wring it forth, then ſtop it again wel, and thus ye muſt color thræ or foure times a day. Then muſt ye take the dye in the veſſell, and hange it ouer the fire againe, and there let it bæ hot, and put therin two pound and a halfe of aſhes. Then put it in the fatte, and ſo let it reſt, but ſtoppe it well and cloſe, ſo let it reſt a night, but ſtirre it once in the night with a ſtaffe, & ſæ in the morning if the die be come, as aforeſayd, & ſo put in your cloth againe, but let it not lye therein to long, that it cole not the die, and as yee

haue thus dyed it foure times. Then shall ye make it hot againe ouer the fire, putting therein two pound of pot ashes, & so let it rest all a night, & stirre it once in the night as aforesaid, and stoppe it close, and when yée goe thereto, see if the dye be come, if it be come, yée may dye, as before, what yée thinke good, and when your colour waxeth a faire green, then is your die good and ripe, and the flowers will lye faire aboue, but as it beginnes to ware yealow, then it is too ripe: and then must yée put in more cloth.

How to dye a faire Linnen with brasill.

Yée shall take so much linnen as ye will, and to euery elle of linnen, take two ounces of gall nuts, or iii. nuts: these nuts yee shall breake in two or three peeces, then put them into a kettle with water, and let them seeth together, and when they haue sod a quarter of an houre or lesse, then take it from off the fire, and take your cloth foorth thereof, and let it a little soake by, but let it not dye. As ye haue thus sod it, ye shall take another kettle with faire water, and put it ouer the fire and make it scathing hote, then shall ye to euery elle of cloth, take two ounces of Allom which yee shall put in the said water, & as it is melted, yee shall take the foresaid cloth and put it into the said kettle to the Allom and let them seeth together a quarter of an houre, then take it forth of the kettle and wring it a little, then hang it to dye a little, but not too much. Then yee must haue your sod brasill as thus: yée shall take lye made of wood ashes, but see it be not too strong, and thereof so much in your panne as will make your cloth weat, then put your brasill into the pan with the lye, and so let it seeth a quarter of an houre, then set it from the fire, and haue ready an earthen panne, and by and by put your liquor and brasill therein, then shall

yée

yee put your ſoreſaid cloth therein, and ſtirre it & turne it well therin, but ſée that it be not too dry of the ſaid Allom that it hath béen ſod with. Alſo to foure gallons of lye, ye ſhall put leſſe then halfe a pound of braſill poulder ſmall beaten.

To make a fayre braſill colour, to worke on cloth or paper.

Ye ſhall take a faire potte and put therein a pound of chalke ſmall broken, and put thereto a pottle of good Vineger, and ſtirre it well togither: then let it ſtand a day and a night, then poure the cleareſt into a faire panne, & ſee that no chalke goe therein then take two parts of the ſaid lye and put it into a faire pot, and ſet it ouer the fire, and ſeeth it fiue nockers long, and then take it from the fire, and put the liquor into a faire pan, and ye ſhall put thereto viiii. ounces of allom & ſtirre it wel with a ſtaffe, then take the other part & put it to the ſaid braſill wood, the which ye haue changed, and let it there ſeeth as afore-ſaid, and then put that liquor into another panne, and put thereto viii. ounces of Allom, which ye ſhall ſtirre ſo well as afore ſaid, and when ye haue toſt it long, put it then to the other and ſtirre it well: and as ye will haue it drie, take a panne and fill it full and ſet it in the wind viii. dayes or more, and there let it dry, and as it is faire yee may worke therwith.

Blue Bucketam to dye.

Take three pound of grutts of Turwin (ſo called in dutch) and a pound of Pese, a pound of Flozay, and to three pound of Sope aſhes, take 12. quartes of water, & firſt yee ſhall put your Flozay into a faire katte, and put thereto ten quarts of water and ſtirre it well al togither, this muſt be ſo hote that ye cannot ſuffer your hand ther-

in, in the other water ye shall put the gruis, with the ashes and bede, and that put together, & so stand, which ye shall stirre xii. houres long, and waxing a blew, so ye may worke with it. If it be not blew ynough, so let it stand couered, xx. houres long.

A red to dye with Crampmede.

Take a pound of Crampmede, to three elles of linnen, and take a faire pot with water, and set it by the fire till it be readie to seeth, and put therein two ounces of gals, and let them so seeth together, and then put your linnen therein, and take it sometimes out and in, and at each time wring it well out. Then take a faire pot with faire water, and make it seething hot, then put therin an ounce of Allom, and so let it seeth well, then put your cloth in as afore sayd. Then take another pot of water, and let it seeth therein till it be red, then take that cloth out, and clense it all about with a cloth. If ye will haue it more darker, then must ye haue a lye of vnquenched chalke, with a like dye: men with woad ashes doe make a red dye or colour, without vnquenched lime, in hauing woad ashes in stead of vnquenched lime.

To dye blacke Veluet or linnen.

Take of gals and coperas, & seeth them together, and put your linnen therein, if it be gray silke, then take of Elder barks, and old yron, and put al in a herring barrell or vessell. Then take gruis or swarfe, this shall be a third dele of the fat, the other two parts shalbe faire water, so let it stand three weekes long, & so stir it often well about, and put your gray silke therein, and as this is done, so shall ye hang it to dry, and so put it in againe, so often till that it be blacke ynough. In stead of galles ye may take barkes of Oke, and Shomakers blacke.

To

To make gray flore.

Take floze and lay it to ſoke 24. houres, then wzing it out thozow a cloth, then take lye of wine aſhes, and ſpzed it two houres long on a faire table, then take the ſayd lye and put it in thzee veſſels, & take the floze and put it into one of the veſſels. Then put it well ſozth, and then put that floze in the leaſt veſſell, then ſo in the middeſt, and in the firſt, but ere ye put the linnen therein, put in vineger and wzing it out.

To dye ſilke red.

Take of good wood aſhes, & make a good lye thereof, and put therein of willow oz faucet woad, & barbarie wood oz yealow wood, & ſoke them therein an houre, then ſeth it a quarter of an houre, then put your cloth therein, & put in a little ſpaniſh greene, but that cloth ye muſt firſt allom it.

To make a blacke water to die with.

A blacke water to die all maner of ſilke clothes, ye ſhall take halfe a pound of gall nots, & put thereto ſomewhat leſſe than a pottle of water, and an ounce of ſwarfe of the grindſtone, and a good deale of the fylings of yron, make it ſeth, & put thereto a quarter of a pound of coperas, and ſeth all to the halfe, and put therein a pound of gumme arabie, then ſeth it till all the gumme be melted. Then ſet it from the fire, the older it is the better it will be.

To make a thicke water to worke on yealow ſilke.

Take a pottle of the beſt bernice ye can, & put in an ounce of bzimſtone in fine pouder, & half an ounce of Camphier, then

then seeth it a while, and let it cole, then straine it thorow a cloth, also with this ye shal worke thinne, and this must be sod with the fourth part of gumme Arabie.

To worke on yealow silke, white, gray or azure colour.

Take a pottle of Conduite water, and a fourth part of Arsenicke in powder, and two ladles full of woad, cut the woad in small peeces, and make it seeth as herring, that is softly, then set it from the fire, and put therein so much of graynes, as ye put in porrage, and herein also ye shall put in of gumme of Arabie, so much as you shall thinke good.

To make a red water.

Take a pottell of faire water, and a fourth part of gumme, and halfe a pot of faucet woad (so called in dutch) and then seeth it together till three pintes bee consumed, then set it from the fire, and herein ye shall put halfe an ounce of spanish greene, and then put in also of graynes, so much as ye doe in seasoning your pottage.

To make a red with brasill.

Take your Linnen to one pound, take a fourth part of Allom, but first seeth Allom, then lay your linnen therein the space of two houres, then take of beaten galles, and put water thereto, then lay your linnen therein, and put in a quarter of a pound of brasill, and an ounce of gumme of Arabie. Then let it seeth a fourth part in, and then put in your Linnen. If you will haue it a redde, then put in no galles.

To

To make a red water for white ſilke or woollen, greene, yealow, violet or azure.

Take a pottle of running water, and an ounce of braſill, ſeeth theſe till the halfe be conſumed. Then take it from the fire, and put in ſo many graines, and as ye put vnto a pot of pottage, and a fourth part of gumme. But if ye will make it a light red, put it into another fat, whereas there is a quarter of a pound of Allum made in powder, and ſo let it reſt all night, and it will doe well.

To make a blew.

Take three parts of Sope aſhes, and one part of vnquenched lyme, and make a lye thereof, and then let it cleare, then ſtraine it through a thicke cloth, and ye ſhall take xv. quarters of the ſayd lye, and put thereto a pound of Bloemen (ſo called in Dutch) then ſtirre it all well together with a ſtaffe, and warme it ouer the fire, ſo that you may not ſcant ſuffer your hand therein, but firſt your cloth muſt be ſod in Allom, and alſo dryed, then put it in the warme dye, two or three times, then after, if ye will haue it blacke or light colour, ſo ye may vſe it, but before all thinges your dye muſt be warmed, ere ye dye or color therewith.

To make a faire ſanguine dye.

Take vpon each elle of linnen, fiue galles beaten into powder, and then take three gallons of water put into a tubbe, and put the powder of the galles thereto, and ſtir them well together, then lay your linnen therein, and turne and wend it wel. Then take and wring it dry out, then let it lye therin againe two houres long, but at each

houre ye muſt wring it, as before, and lay it therin again in the tubbe, and as it hath layne two houres, & ſo wrung out, then take an ounce of Allom, of the beſt, and three gallons of water in a kettle, & make it well and hot readie to ſeeth, till all be wel molten, then ſet it from the fire, and put your linnen therin, & do it as ye haue done before againe two houres long, then after that take a pan, and put therein two gallons of water, and warme that like the other, then take three ounces of brazil, and caſt it therin, againe let it ſeeth a quarter of an houre, then take a good quart of water, and caſt it therein ſeething, and take a quart of that die, and lay your linnen therein fire or vii. paternoſters long, ſo that ỹ dye be drunke all in the ſayd cloth, then wring it forth and handle it well, then lay the cloth againe in that dye, toſſe it, and turne it and wend it well therein, and let it lye therein ſo long as aforeſayd, and ſo wring it out, then take the third colour and lay it therein, and let it lye therein a quarter of an houre, and ſo it will be well.

A light red dye for Skinnes.

To die a faire light red, take 14. drie ſkinnes as they come from Antwerp, and put them in the riuer, or in water two daies, and two nights, then take them out of the ſaid water, and put into a fat, a kettle full of vnquenched lyme or chalke, and put ſo much water thereto, as the felles may well be couered therein, then ſtirre them well with a ſtaffe al together, and put your felles therein, then turne and toſſe them wel, if it be in the ſummer, it ſhal be ynough to lye therein eight dayes, & ye muſt each 2. daies ſee vnto them, if it be in the winter, they muſt lye therein a moneth, then take your felles out, and hang them again in the foreſaid riuers or water three dayes, & three nights, then after waſh them well in a tubbe with luke warme water

water, and ſtampe them with your feete, then after waſh them againe in the riuer water as afore ſayd. and hang a kettle ouer the fire with faire water, and therein put 4. pound of Allom, and when it is molten in the water, ſething hot, putting in ſo much water that it may be no hotter, but your hand may ſuffer therin without ſcalding, then ſet it from the fire, and put your Felles therein, and ſtirre them well with your hand, ſo let it reſt a day and a night, but as ye goe to bed you ſhall ſtir them once well, then after take your Felles forth, & wring the water well out, and as your Felles doe ware ſomewhat drie, ye muſt weat them againe: then take 4. pottles of pille that is ſtale, hang it ouer the fire in a pan, let it ſeeth wel, & ſcum it clean ſo long as any ſcum wil riſe, then put in a pot ful of beaten lacke, and let it therein ſeeth a little, and put therein ſo much Allom as a haſel nut, & giue it therewith a boyling, then ſet it from the fire, and let it ſo reſt till it be colo to ſuffer your hand therin, thē put a glaſſe ful therof in your felles which be readie ſowd like a ſacke, & hold it to aboue, & with your other hand hold vnder, and ſhake it vp and down as you would bolt meale, doe thus ſo long til the colour hath well taken the leather, then turne your fels about, but if it be faire ynough let it ſo be, if it be not faire ynough, put of your ſayd ſubſtance againe another halfe glaſſe therein, and ſtirre it about as before, and then rippe your felles, and hang them to drie in ſome hye loft. And as they be drie, ſo take and lay them a night in a fat with water, & nert day taw thē on a ſharpe tawing yron, vntill they be all workemanly done, then they are well.

To make leather red.

Take an ounce of allom & melt it in a gallō of water, thē take a calfes felle, & ſpread it on a rame, ſo let it be rubbed all ouer with allom water firſt, then incontinent ye ſhall

ſtrike it all ouer with brafill water, and let it ſo drie in, and then ſtrike it all ouer againe, and ſo let it dry in like, but the colour or die muſt be made warme alwayes when ye rub thereon. But firſt ye muſt make it weat with cold water, and wring it againe out, and then ſtraine it forth on a bord and ſo ye may vſe it.

The foreſayd brafill water, ye ſhall make thus. Take three gallons of raine water, and put therein foure ounces of brafill woad made in powder, and halfe an ounce of Wey-aſhes, called Sope aſhes, with a little ſaffron. Then ſeeth it ſo long till the third part be waſted. Then cleanſe that out, and the pot with raine water again, and let the halfe ſeeth away. Then is the ſtrength all out, and with this laſt water ye ſhall colour firſt, and with the firſt water, ye ſhall die or colour laſt.

To dye red felles.

To dye red Leather, ye ſhall ſeeth Lack in bean ſtraw, and a curſy piſſe, as aforeſayd is. Then put therein ſo much as two great Beanes, and then take an ounce of brafill water, and ſo let them ſeeth together.

To dreſſe Felles with gold.

To dreſſe Felles with gold, take browne red, & grinde it on a ſtone, with water mixt with chalke, and lyme water, and therewith you ſhall ſtrike your Felles twiſe ouer, then lay your ſiluer or gold thereon, and let it drie, then ſhall ye ſmooth it with a tooth, and ſo ſtrike it ouer, and then drie it in the ſunne.

To colour greene Felles.

To colour greene Felles, take Spaniſh greene, & grind it

it vpon a ſtone with wine Vinegar, & ſome ſaffron, temper this with gumme water and lyme, and ſo ſtrike your ſkinnes therewith.

To guild on Leather.

Ye ſhall ouerſtrike your Leather thrise with whites of egges, and gumme water, then lay your gold theron, and licke it well and faire, or the yolkes of hard rosted egges, mirt with gumme water and ground, the red and the gray ſkinnes ye may vernish them, take a flat baſon, and put fire vnder, and ſpread the Felles thereon, and ſtrike varnish alſo ouer the ſkinnes, where it is coloured, but afore you ſtrike your Felles, ſtrike it warme on the Baſon, and then let it drie, then ſmooth the colour all ouer euen, and when it is drie, then licke it, or burnish it with a tooth, and as ye will haue it faire, ſo take an end of a tallow candle, and rubbe it on your arme, from the hand to your elbowe, then ſtrike it all ouer with that part of your arme, and it is done.

Againe to colour Leather red.

Take the dye for a red Leather, and take an ounce of braſill, in a nealed pot, and ſæth till the third part be waſted, but firſt waſh your Leather in Allom water, or in other water, but let it not lye long therein, ſo let it drye, and put it therein, and let it reſt two dayes and two nights on a tathe, and then hang that Leather in the ayre to drye.

If ye will haue it ſanguine, take of Vine braunches aſhes, and make lye thereof, and with this lye, ſæth your braſill woad, and ſo ye may colour red therewith.

To colour Leather greene.

Take an ounce of Equiſetam, in Engliſh horſetayle, it is an hearb growing in low places or medowes, put therto of old ſtanding water, with a quantitie of Allom powder, with a little coperoſe beate in powder, ſo vſe it.

To colour a blew Leather.

Firſt you ſhal take an ounce of Endix, ſo cald in Dutch, with one ounce of chalke, and a pottle of Vineger, or good ſharpe lye, then put all into a baſon, and there ſtirre it all well together, firſt your fels muſt be made ready therto, as afore is declared, then put your ſtuffe thereon, and ſo vſe it as the other, and it wil ſhew a faire blew element colour.

To make a faire red colour.

Take your Leather which is allomd before, then take of old piſſe, of ſuch as vſe to drinke much wine, and let it ſtand till it ſtinke, then take the cleareſt thereof, and ſeeth it til the half be waſted, then take two ounce of lack, with one part of brazill, a part of Allom, & a part of Salarmoniacum, beat them all together, and put them into a pot, and ſet it ouer the fire, and ſtirre it well with a white ſticke, vntil the ſticke ware red as blod, then take it off, & colour therewith luke warme.

Another fine red colour.

Take halfe an ounce of brazill powder, and halfe a pottle of old water, ſeeth them together, and ſcum it wel, then take a litle allō, which muſt be firſt kild in clay, firſt take it

it from the fire, and put them in your ſayd allom. ſo reſerue it, and vſe it as the other.

To make a light blew colour.

Take the flowers of the blew bottles among corne, and picke them off, then grinde them in a ſtone or morter, and put thereunto a litle Vineger, then temper it with allom as aforeſayd, ſo ſhall ye haue a faire blew colour, ſo may ye vſe it incontinent for it will not laſt long, but chaunge colour.

To make a white Leather blew.

Take hengarten beſien, ſo cald in Dutch, which I take to be the low Elder, cald Dane wrote, ſæth the ſayd berries in water, then with your hand ſtirre them well about, and alſo breake them, ſo done, then ſæth it againe a while, and ſo let it cole, and being warme, ſtrike all ouer your leather once or twiſe, or as oft as ye ſhall ſée cauſe, then take of Endiv, ſo called in Dutch, and ſtrew of that powder thereon, and rub it in, and ſo it will doe well.

Another way for red Leather.

To make your red, take a pound of Hoſherumps with a little of vnquenched lyme, then put thereto a pottle of water, and let it ſtand a night, then take two parts of other faire water, and a third part of chalke water, with a quantitie of braſill, then put all the ſayd ſtuffe into a leaden pot, and let it ſæth till the halfe be conſumed, then it will be well, and ye may vſe it as the other.

To

To make a greene colour.

Take the leaues of an hearbe called night ſhade, then ſtampe or beate it in a morter of ſtone, ſo temper it with Allom, and ſo colour your ſkinnes therwith, alſo ye may take of the græne berries of the græn Berrie-træ (which the Painters vſe) ſtampe them, and ſo let them reſt ten or twelue dayes, then ſtraine them, and put Allom water thereto, and ſtrike your ſkin therewith, but firſt make it warme, and ſo vſe it.

Another good greene.

Take one part of the foreſayd lowe Elder berries, and ſæth them in ſufficient water, then put therein two ounces of brazill powder, and an ounce of walkers clay, with a pottle of old water, let all theſe ſæth a good while together, then put in your beaten Allom, but not afore, ſo ſhall it be a faire colour as the other.

If ye will haue it a more darker colour: ye muſt therewith ſtrike twiſe all ouer your ſkinnes: to haue it a lighter colour, then ye ſhall mingle it with old raine water, and ſo vſe it.

To colour blacke Leather after the order in Germanie.

To colour Leather black, take a Herring barrell, and lay it 3. fingers thicke in the bottome with Elder barks, then take the fylings of yron, and ſtraw it all ouer the ſayd barks, then take as much barke of Elder againe, and lay it therin, and ſo likewiſe your filings thereon as before. Doe thus, till the ſayd Barrell be three quarters filled, and hath taken to the quantitie of foure pottels, or more

more of the filings, then take ſo much of raine water as will fill it vp to couer it all ouer, ſo let it ſtand a month before yee colour therewith, and euer as it wareth emptie, fil it vp againe with filings and raine water as before, letting it ſtand (ſo filled) a moneth after, and alwayes let the laſt couer be the fillings aboue: and when you liſt to colour therewith, vnto thæ pottels of colour, ye muſt haue iiij. ounces of beaten galles, and two ounces of coperas water, then let it ſæth together before ye die, that ye may colour the better therewith: thus yee may vſe it at your pleaſure.

To colour a white Leather.

Firſt take your ſkins and hange them in lyme water, till they ware ſupple, or in chalke water, and when they be wel ſoked, if ye wil make haſt of them, firſt take off the haire, and cleanſe it out of the ſayd water, ſo that all the ſubſtance afore ſayd bee taken forth of the fels, and being cleanſed then a day or more, then wring the ſayd water al cleane forth, and let them drie, and to fiue felles put not aboue two ounces of Allom, and let your felles lye therein a night and a day, then wring them and drawe them wel vntil they bee al cleane, and then vſe them.

Another faire red colour.

Take a felle or fels, and weate them in Allom water and ſalt mingled together, and to iiij. ounces of ſalt, take viii. ounces of Allom to the weating of your ſayd fels, and alſo two ounces of lime, then ſæth al in two pottels of raine water, then ſtraine it through a linnen cloth, and waſh therewith what fell ye wil, then ſpread it abroad on the earth, and take a woollen cloth, and with the ſame

licor, strike the said felles all ouer, and so let them drie. Then they will be readie for to receiue your colour, then after that take at the least foure ounces of the licor of the last end of a brewing, with two ounces of brasil powder, then seeth all these in two pottles of the lye of sope ashes, with one ounce of Allom, and when it is well sod, take it off the fire, and all to strike your felles therewith, & then let it drie, and so they shall be readie and soft withall, and heere yee must vnderstand with what colours yee shall strike your fels withall, which is, with the red, and with blew, and also greene, for these shall chiefly abide and not goe off also to weat your felles, where linnen yarne hath beene soked in, it will be likewise verie good.

To colour a blacke Spanish Leather.

Take of Pomplemele, so called in dutch, and make it warme, then wash your felles therewith till the white come no more off neither forth thereof, and to a small fell ye shall take 4. ounces of Venis tot appelen, so cald in dutch, then beate it a little into peeces, and cast faire water thereon, and seeth it till it waxe soft, so that ye may wring it betwixt your hands, then straine out the water thereof, if it be too hot, take a broade earthen pan, and put the sayd licor therein, then spread your skin abroade and dip your fell therein till it be well weat, doe it so 3. times or 4. times, then take good Shoemakers colour, or blacke, so much as ye shal think good, with which ye shal make ye fell thorow moyst withal, & put thereto a litle vitriall coperas, then wring it wel forth, & lay it together, and let it dry softly, then take it ere it be thorow dry, and wring it betweene your hands, for so it wil be soft, do so oftentimes and when it is drie, take of Goose-grease, or hogs greace in a woollen cloth, and rub it therewith too and fro a good space before a fire, or by a hot Ouen, so rub and chafe it

well

well in with your hands, that the greaſe be not ſeene, Or both, Owle greaſe is the better, then Linſeede oyle, or Shoomakers trayne.

Another way for blacke Leather.

To make a blacke Leather, be it ſhéepe or other. Firſt take your leather and ſtretch it, thē ſprinkle it wel out of your mouth with water, then take your tawing ſtocke, & taw it wel therewith, alſo rub and chafe it together with your hands as Shoomakers doe, & draw it wel with your paring yron, then put it on your dreſſing bord, & ſtrike it with a woollen cloth til it be al euen, and then ye may colour it, and when it is well coloured, then wring the ſaid colour out of your ſkinnes, ſo put it againe into the ſayd colour, and ſo doe as ye did before, at the firſt time it muſt be alway twiſe coloured, then hang it in the ſunne and let it drie, then ſhall ye take it againe, not being thorow drie, rubbe it, and ſo colour it againe, as before. If yee haue it verie ſoft: rub and chafe it betwirt your hands, euer before you colour it, ſo being well dyed and coloured which at the leaſt muſt be 5. or 6. times ouer. Thus yee muſt do for ſhéepeſkinnes, which alſo muſt be dreſt with allom, and when ye lay your colour on them, then take linſeede oyle, & with a woollen cloth, ſtrike your dreſſing yron therewith, and when your ſkinnes be thereon well tawde, then take of your ſtright colour or dye out of your fat all cold, and colour your ſkinne therewith once after your ſayd linſeede oyle. Then put it together, and wring forth the oyle and greaſe therein, and the colour alſo, and being well wrung out, lay it together, and colour it once againe, and being thus coloured three times ouer, then take and drie it, and ſo it is done.

To guild on Leather.

First, ye must worke it well, and ouerstrike it with the whites of egges and gum water beaten together, then lay your gold thereon and strike it well, ye may temper therwith hard yolkes of egges beaten with gum water. The red and greene skinnes ye may varnish, as to take a bason with a smooth bottome, and put coles vnder, and then lay and spread your skinne thereon, so strike your skinne al ouer with varnish, but afore ye strike it ouer (on the bottome of the bason or pan) yee shall first rubbe and warme your skinne all ouer on the basons bottome, then strike your colour all ouer thereon, and so let it drie, and being drie, smooth it with a fleke-stone, and so ye shall make it faire.

To make a lye to dye a blew.

When ye will dye a blew, ye must make a strong lye, and ye must take twise so many ashes with a third part of chalke, then make it seeth foure paternoster whiles, the cast thereto of cleane ware, which will make it clarifie the better, then set it ouer the fire, and let it there soke two houres or thereabouts, then put into a pan fiue pound of woad, and put it to the sayd lye, then hang it ouer the fire and warme it well without seething, and then put it in some herring vessell, let it remaine there halfe an houre, then cast therein halfe a pint of Zemes, so called in dutch, and stirre it well with a staffe, then couer it well the space of a quarter of an houre, and then it will be good and ready to die with, then take of linnen yarn or woollen cloth, either Fustian or Myer: to haue it a light blew, put it but once in, and to haue it a little browner, put it in twise, & to haue it more browner, put it thrise in, or so long til yee

see

ſæ it bꝛowne ynough, and when yæ haue dyed what yæ pleaſe, let the veſſell reſt till another day. If then ye wil die moꝛe yarne, linnen oꝛ woollen, then muſt the dye bee taken out of the veſſell, and put into a kettle, and put therto 4 quarts of lye as is afoꝛeſayd, ſo couer it wel and let it ſtand one houre, then put therto halfe a pound of græning wæde, and hang it ouer the fire againe, and let it colour well without ſæthing, then caſt it into the veſſell with a pint of Zemes, and couer it well, and let it reſt a quarter of an houre, and then put therein againe to die what yæ thinke good, and colour it as is afoꝛeſayd, alſo when ye doe ſet and pꝛepare your latte, yæ muſt haue to euerie ounce of græning wæde, one quart of good lye.

To colour or dye a blacke.

Make a veſſell, and put in cold gall water, then lay your Fuſtian therein, ſtirre it and handle it well therein, and then put it into the blacke die, and toſſe it and handle it well therein alſo, and then againe in the gall water, and againe in the die, doe thus ſo often till it bee dyed ynough.

To dye a faire yellow colour as Gold.

Lay firſt your linnen in Allom water foure houres long, then take one part of chalke, and two partes of wood aſhes, then make a lye thereof, and ſæth your dye therewith, alſo the beſt lye to die with is, to take 2. parts of wood aſhes, and one part of chalke, woꝛke and die it as yæ ſhall percetue beſt.

To dye Fuſtian gray.

Take of hay aſhes, and vine aſhes by themſelues, and make a lye thereof, then put your fuſtian there in the hay lye, and then in the other lye, do it thus ſo long till ye ſee it all coloured ynough, with theſe and ſuch like ye may dye linnen gray, but ye muſt put thereto a little moze of galles.

To dye blacke ſilke or velues.

Ye ſhall firſt ſoke your ſilke in gall water an houre long, and then let it dzie, then ſhall ye lay it in the lye of ſaeche meale, (ſo called in dutch) and with aſhes of vines, and lay it therein xii. houres oz moze, then let it dzie wel, and after ye muſt ſæth it in blacke die two oz thꝛee times till that ye thinke it be faire ynough.

To dye a ſilke that hath loſt his colour.

Take Satten oz Damaſke that muſt be made blacke, ſæth it firſt in the die of Madder barkes, then dzie it in the winde, then ſæth it againe in your blacke die, and ſo let it dzie alwayes againe. And if then it be not blacke ynough, ſæth it in gall water and blacke die, till it be faire ynough, ſo let it dzie, then rub all ouer with butter, oz ather greaſe, and wring it well betweene your handes, then ſtrike it ouer with a faire woollen cloth, and ſo it wil be well.

To make a gray Fuſtian.

Firſt lay your Fuſtian to ſoke the ſpace of 3. houres, then

then to viii. elles of Fustian, take two ounces of broken gals, and put them into warme water, then put your gall water into another fat, with eight quarts of fresh water, then lay your fustian therein, and stir it well with your hands therin, tosse it wel, and wring it forth well, & lay it therein again one houre & so wring it wel forth, then put it into the blacke die, and lay it therein another houre, so wring it well, then scoure it in faire riuer water, and then hang it to drie, if then it be not gray ynough, soke it again in faire water, and then put it into your gal water, and then the blacke die, then scoure it and drie it, so burle it and dresse it vp, and so it is done.

Blacke silke to dye.

To one pound of silke, take 12. gall nuts beaten into a fine powder, then seeth that silke with the galles in common water, halfe an houre long, then take of your blacke dye, and seeth it therein another halfe houre, then take it forth, and let it cole, and then put it againe into the die, and let it seeth therein another halfe houre, if then it be not faire ynough, seeth it therein, til it be faire, then take and wash it out of that colour and hang it to drie, and so it is done.

To colour curried skinnes greene, or felles to couer Bookes.

Take the buds of white and blacke thorn, which ye must gather in the moneth of August, when they begin to ware ripe and blacke, put them in a well leaded pot, the space of Eleuen dayes, then put thereto foure ounces of Allom, & boyle them together well, then put it into a powdring vessell of Beche or Horne, and close it well that it take no

winde,

wine, then ſet it a little in the ſunne, and when ye would colour therewith, take alittle of the ſayd colour, & mire it with ſome lye, and warme it, and then ſtrike it on the ſkins, and ye ſhall ſee a faire colour. Alſo take Lincaile, or canker of Latine, hony, and mire them together in like and put thereto pille, ſo much that it may take colour, and alſo ſtaine the ſkinne, and then drie it in the ſhade.

To make a yealow colour on skinnes.

Take the ripe ſeeds of Merpyn, ſo called in french, dry them in the ſunne, and when ye will worke therewith, temper it with lye, and with a little Allom of the Rocke, and let it reſt till it be molten, the which will make it to take a yealow colour, but the lye muſt firſt bee heate a little.

To dye thread blacke.

Take a quantitie of broken or bruſed galles, and boyle them in water in a ſmall potte, and when they haue a little boyled, take out all the galles, and put into the ſame pot ſo much Coperas as ye haue had of galles, and put therewith a little gumme of Arabye, and then giue it againe another boyling, ſo let it boyle a little, and with the ſayd dye, ye ſhall colour therein your thread, then take it forth, and ye ſhall ſee it a faire ſhining blacke.

To dye thread gray.

Take of the ſayd blacke die, ſo much as ye liſt, and put thereunto halfe ſo much water, more or leſſe as ye will haue your colour dape or light. Then boyle your thread therin, & you ſhall haue it gray as you liſt, either browne or lighter, or after a mouſe dunne.

To

To die thread in ſad Purple colour.

Take the barkes of Pomgranads, and the pilles of dri-ed Oranges, then boyle them in water with a little Al-lom, as great as a ſmall nutte, then let it cole, and when it is colde, put your thread therein, and boyle it againe, and ye ſhall haue a faire colour.

For to currie a raw Gote skinne.

Take a gotes ſkinne raw, and put it in warme water, and let it reſt there a daye, then ſcrape and cleanſe it very cleane, and take away all the filth thereof, and to finiſhe it, take water, and ſet it ouer the fire, and put therein a handfull of ſatte, and foure ounces of roche Allum, then ſtyrre all together till it begin to boyle, then ſet it from the fire, and let it reſt till it be cold, then take an egge, and beate it with a little Oyle oliue, this done put your gotes felle in the ſaide water, and ſtirre it well all about with your hands three or foure times, and ſo it ſhall bee in good caſe and well curried.

To die skinnes in a blue like azure.

The woll being cleane taken off, and the felle waſhed cleane in faire water, ſo wring it al out, then take the be-ries of the græning tree, as paynters vſe, and the berries of elder, ſeeth them together in water of Allom, then ſtrayne that water, ſo let it reſt, then poure away the vp-permoſt, and ſtrayne the reſt againe, then let it dye, and waſhe with that cleare water, but ſee that your felle bee cleane: then take your colour, and ſtrike your felle all o-uer therewith being warme, and ſo let it dry, ſo it will bee a good colour.

To die skinnes in madder, celled Cuba tinctorum in Latine.

First se that your skins be ready washed and wrung cleane, and so layde abroade, then shall ye wette it all ouer with the lies of white wine, wherein baye Salt hath bene boyled, and so wring forth that againe, then take the ashes of the shelles of Creuis, or Sea-crabbes, and temper it with the foresaid water and salt, and therwith rubbe your skinnes and wash them wel, then with cleare water, and wring it, take ruddle and temper it with the said lyes, and rub it all ouer therwith, & so with the said ashes, thus wash and wring it three times, if it be not then well, ye shall giue it a colouring with Brasill, and your Madder mixt together with the sayd water or lies, or that some tartar haue ben sod in, which must be made warm, when ye lay your ruddle, so leaue it a night then put on your Madder, mixt with Allom, or lies, or allom Catinum steped in water, also you may ad vnto it, the shering of scarlet taken out of the boyling lye, which is also good.

A good greene to greene Skinnes.

Take first and cleanse your skinnes, annoint and soke them well in cold water, then take the berries of the sap grening tree, and being ripe about Michaelmas, take & stampe them, and so let them rest 3. or 4. dayes, then put thereto of raine water a litle, and then boyle them with a soft fire, stirring them stil, the if ye wil haue it light gren, put to but a little allom, and the sadder grene put to the more allom in the boyling, and boile it but a litle, then ye may fold your skinnes in the middest, and rub him on both sides therewith, and then with a litle powder of allom, then take ashes burnt of sheepes dung, and all ouer rub

rub your ſayd Felts therwith on both ſides, then rub him with the ſayd colour againe al ouer, ſo waſh it with faire water and let it ſo dry, but finely wring it out, then ſpred it, and caſt of the foreſayd thinne colour, all oder the Felle, and ſo let him drie, and it will be a fine colour.

A fleighter greene with the ſappe berrie.

Let your ſkinnes be firſt annointed, and well waſhed and ſo wrung forth, and then ſtretch them as the order is, then take of the ſame ſap berries aforeſaid, let them bee ſtampt with roch Allom and water, and a litle boyld, and therewith giue your ſkinne a ſtroke or two all ouer, and then let it drie, then giue it a colouring with yelow, made of the ſayd berries, ſod with allom and water, and again of ſaffron, then let it drie, and ye ſhall ſee a faire colour.

Another greene of Skinnes.

Your Skinnes being annointed, waſhed and ſpread, ye colour it with the foreſayd ſappe greene, and put vnto it a few weat aſhes, and rub the Felle all ouer therewith, and being waſhed and wiped againe, ſtrike it ouer with Indian colour, ſod with roch Allom, then let it dry, then ſtrike it ouer with the foreſaid yelow, and ſo ye ſhall haue a faire excellent greene colour.

To die a Crimſon colour.

Scrape hard ſope, and ſo melt in common water, and put your ſilke in a linnen or thin canuaſſe bag, and ſo put it into the kettle to the ſoped water, and let it boyle ſoftly halfe an houre ſpace, but ſtir it oft for burning, then waſh it in ſalt water firſt, and after in freſh water, for each pound of ſilk, take a l. or more of Allom, laide ſufficient

in colde water, & therein put your silk without your bag, and let it rest therein viii houres, then take and wash it in fresh water, then wring it, & put it in the panne to the crimsine colour, being wel stampt & cleane, tak 4. ounces, and boyle it with so much water as will couer your silke foure fingers aboue the water, & to each pound of crimsine colour, put to thrée ounces of galles in fine pouder, or in steed thereof yée may put in halfe an ounce of arsnick, which is not very wholesome because of the fume, nor the water thereof, and when it boyleth put in your silk as afore prepared, and there let it boyle a quarter of an houre then wring it a little, and dye it in the shade, and so it will bée faire.

To die a blacke after the common sort of the countrey women.

They take so much water as will couer the hose, or other cloth, but first they all to strike their hose or cloth, with swart of the grindestone, then they lay alder pilles first in the bottome of the vessel and thereon lay your cloth or hose, and then pilles thereon againe, then lay your hose thereon, and pilles thereon again, and then couer al with water, so let them boyle softly two houres space, & turne your cloth often therein, then sée if it bée blacke ynough, if not, take new swart, and pilles, and vse them as you did at the first, and so boyle them agine till they be black, then scoure and wash them out, and it is done. Some women de take (in stéde of alder) plumtrée pilles, some black thorne, and some yong oken pilles, and oke apples grene and so dyes with them in like case, or the tender shewts of brackyers, or grene walnut hulkes, all these are good in summer to die with.

How

How to harden Iron and Steele, and also to ſoften, to ſowder and to gylde.

To make Yron or ſteele as ſoft as copper.

TAke a chalk ſtone vnſlect, with as much Allom, firſt ſtampe the Allom very fine in a mo3ter, then take your chalke and mingle therewith, then ſp3ead it halfe a finger, o3 a finger thicke on a linnen clout, and w3ap your y3on therein, which ye would haue ſoft, and lay it in the middeſt of the fire and there let it lye an houre o3 mo3e, till the fire is out and be all colde of himſelfe without any other thing done to it. Then ſhall ye take out your y3on o3 ſteele, and it will bee as ſofte as it were right copper in his hardneſſe.

Another way to ſoften.

Another way fo3 the ſame, take only a white fire turffe, and lay your y3on o3 ſteele in the middeſt thereof, and lay it in the fire, and let it lye there ſo long, til the fire do go fo3th, and war colde of it ſelfe, then take it out, and it ſhal be as ſoft as neede ſhall require.

To make Yron ſofte.

Take the water, o3 the iuyce of Ratany, which I take to be the Rape, then heate your y3on hote, and quench it therein, and it ſhal become ſofte againe.

Another way to make Yron ſoft.

Take of Sope aſhes, and vnſleckt lyme, of either alike, then make a lye thereof, which lye ye ſhall ſtraine nine times thorow a ſtrayner, then take either yron or ſteele, and lay it therein one night, and it will be ſo ſoft ye may eaſily cutte it, if yee will then haue it hard againe, ſo quench it in cold water, and it ſhall ware hard againe.

Another way to make Yron or ſteele ſoft.

Take the yelow flowers of Marigolds, with the ſtéle and bloſſome, ſtampe the flowers, and ſtraine it thorow a cloth, and put that iuyce into a pot, then take the yron or ſteele that ye will make ſoft, and as red hot as yee can doe ſteke it in that iuyce, and it will bée as ſoft as Copper.

Another way to ſoften.

Alſo take ſlecken and long wormes out of the earth, of each alike, and a third part of ſalt, then take an earthen potte, and make it full of holes in the bottome like to a ſiue, then take the ſalt, and ſalt the wormes into the pot. Then take another potte, and ſet it vnder that pot, then will that ſalt melt with the wormes, and runne into the other potte, and that in the vnder potte yee ſhall kéepe, then lay a ſtone on that pot, and make it to ſéeth it well, and ſcum it ſo long as any ſcumme will riſe, then take it from the fire that it may cole, then ſcumme that off aboue, then make your ſteéle redde hote as fire, and ſo quench therein, which yron or ſteéle a man may bow like as it were copper: then to make it hard, heate it red hot, and

and quench it in cold water, and ye ſhall thinke it were fine ſteele.

To make yron ſoft.

Take an hearbe called in Latine Vngula cabellina, it is a clote, called in Engliſh of ſome Colts foote, or Buls foot, take & make a water therof, and make your yron red hote, which ye will haue ſoft, then quench it in the ſayde water, and it ſhall become ſoft, that yee may vſe it for your purpoſe, and ſo harden it againe as the other.

Another way to ſoften.

Take Slecken ſo called in dutch, and ſtampe it with ſtrong wine Vineger, then make your yron or ſteele red hote, that ye will haue ſoft, and quench it in the ſayd iuyce, and then it ſhall bee ſoft like the other, and to make it hard againe, wherein to quench with cold water as before.

To make Steele or Chriſtall ſoft.

Take of vnquenched lime, with as much of ſope aſhes and thereof ye ſhall make a lye after this manner, which is, yee ſhal ſtraine it thorow a ſtrainer 9. times, then take your ſteele or Chriſtall, and lay it a night therein and a day. ſo it ſhall bs verie ſoft, if ye will haue it hard againe ſo quench it in cold water as the other aforeſayd.

Another way to ſoften yron.

Take your yron red hot, then quench it in Linſeed Oyle, doe this ſo often till ye ſhall perceiue it to be ſoft enough,

ynough, and another is, tak the blod of Eels, and make your yron hote, and quench therein.

Againe to make yron ſoft.

Take clay, and lappe it round about your yron with a wette cloth, then lay it in a hote fire of coles, or in a fire of white turffes, ſo lette it lye till hee cole by himſelfe.

Another to ſoften yron.

Take the iuyce of an herb called in latine Marubium, in Engliſh Horehound, with the iuyce of gherwe, ſo calde in duche, which I take to be Henbane, and alſo the iuyce of Radiſh, and mixe them with Aquavite, then quench therein: and when you will haue it hard againe, then make it red hote as before, & quench it in the colde water.

To make yron as ſoft as leade.

Take and make blake flintes into a fine ponder, and grinde it wel vpon a paynters ſtone, the put it in an yron panne, & make it red hote, then caſt it on a marble ſtone, till it be nie colde, and then againe make it red hote, then let it cole, and grinde it ſo long till it cleaue to the ſtone and grinder like clay, then put that in a glaſſe, and ſet it vnder the eaues of a houſe, where the ſunne commeth not nie in the day, then the night after, take out the water that ye ſhall finde in the glaſſe aboue theron, then take that ponder, and grinde it with the water, and put it in a ſtillatory, and let it ſtille out the halfe, then reuerſe the water againe vppon the ponder, and ſtill it againe with a ſoft fire, then take and ſeth that water till the halfe be waſted, ſo done: then take ſome yron blade that is new

broke in two, and put it together and hold it ſo a little while, then take of the water which was ſod to the halfe, and with a feather lay it firſt on the one ſide of the blade, and when that water is cold, then lay it on the other ſide, and it will ſolder faſt with that water.

And with this water ye may make ſteele as ſoft as lead, or butter, and to make thereof with twies, as in ware what ye lyſt. Alſo this water is a ſoueraigne thing to helpe the goute, if therewith it be annointed where the greeſe is, and it will ſone remedie it. With this water ye may make letters on yron or ſteele, to write with a water thereon with your pen. Then after take of the vnſodden water, and put thereto ſome ſaffron, and grind it together, and then draw thereon what ye will with other water, and ſo let it drye, which ſhall ſeeme a faire colour like gold, thus ye may mix and grind any colour ye pleaſe with your ſodden water, and it will ſhew in like faire.

To make yron or ſteele ſoft.

Take the iuyce of Hemlocke, ſtampe and ſtraine it, then put vnto it of Neates oyle, and ſo warme it, and being warme, make your yron or ſteele red hot, and quench therein, and then heate your yron againe three or foure times, and ſo quench therein, till you ſee your yron become ſoft, and bow like lead. alſo ye may take oyle, and droppe into it molten lead three or foure times, and therein quench your yron or ſteele alſo.

To make yron or ſteele ſo ſoft that ye may eaſily wreath it.

Take the gall of a Bull or of an Ore, and mix it with Vernish and piſſe, with the iuyce of Nettles, each of like quantitie, then make your Steele or yron red hot, and ſo

quench therein, and ye shall see experience.

To make yron soft another way.

Take Saluiter, Vitriol, in powder made and well beaten together: then ye shall distill them in a Lymbec of glasse. Then take the sayd distild water, and your yron which yee would haue soft, lay it therein a day and a night, then take out your yron, and couer it in hot horse dunge, the space of fiftene dayes, then worke therewith and ye shall see experience. Also in making your yron red hote, yee may quench it in Ore dunge, or Cow dunge mixt with honye, and Pyle oliue. Then heate it, and so often quench therein, and ye shall see it will bee so soft, that ye may make or worke with it at your pleasure.

Another good way to soften yron.

Take honie and scum it cleane, and then take of fresh new Goates pisse, a quantitie of Rock Allom, as much of Burras, also of oyle Oliue, and salt in like portion, then mixe them all well together, and make your yron red hote, and so quench it therein.

Againe, when yee would soften any yron or Steele, first hold it ouer the flame of the fire till it be hot, then strike it ouer with suet or other grease, then hold it ouer the fire and let it drie in, doe so twise or thrise and it will be soft.

Also take of horne and scrape it vpon leather, and put thereto Salarmoniac, and pisse thereon, then turne your yron thereon being hot, till it hath consumed your leather and stuffe, and so it will be soft.

Likewise take of Salarmoniac, of vnslecked lime, of each like, of Venis sope more than both the other, stir all well together, & lay your Steele therein, and make it moyst with

with Vineger, ſo let it reſt therein foure dayes, & worke therewith, ye may vſe ſmall pieces ſo, but for greater, Cow dunge, whites of egges, and clay, temper it with Vineger, and lay your ſteele therein.

Another, take ſalt, wine ſtone, of each in like portion, temper it with clay altogether, & ſo lay your ſteele therein, and ſo lay it in the fire, the ſpace of two houres, then take it forth, and let it cole of it ſelfe, and it will be ſoft.

Againe, take of ſope and vnſleked lime, of each in like portion, and of Salarmoniac ſomewhat leſſe, and worke and make a paſt thereof, then lay your yron or ſteele therein, and ſo lay it round with clay, and lay it in the fire, and heat it red hot, and then take it forth and let it cole of it ſelfe, as the other aforeſayd, and then you may worke thereof at your pleaſure.

A powder to ſoften mettals.

Take 4. parts of looking glaſſe, of galles, of other glaſſe of ſalt, of each one part, beat and mix them all well together, & 3. parts of the ſame powder, & 1. part of your mettall, and melt them together, and ſo vſe it as ye pleaſe.

To make yron hard.

To make yron hard, ye ſhall take the diſtild water of Maruen, and heate your yron red hot, and quench it therin, doe thus 8. or 9. times, and ye ſhall ſee it very hard: alſo another, which is, take the greene iuyce of Marubium, cald in Engliſh horehound, with the iuyce of radiſh, mixt with ſome Aquavite, and your yron being red hot, quench therein, or take the ſayd horehound, and dry or burneit, and then make powder thereof, & mixe it with much ſalt, and harden therewith.

Another way to harden yron.

Take of Antimonia, Callamint & Coperas, beat each by himselfe to pouder, and then strew therof on your gloing yron, and so beate it againe, and all to smeare it with these powders againe, then temper it with this iuyce following. Take the iuyce of Celondine, as much of the rootes as blades, till r. pound waight, and stampe them and seth the iuyce to fyue pound, and when ye will season any mettal, quench it in the said iuyce of Celiden, and it shall be hard.

To harden hammers and kniues.

To harden all manner of edge toles, ye shall take horse dunge, and then make your Kniues or other toles red hot, and so quench it therein, also to take the filings of yron or stele, and they will harden also, or take shoes and burne them till they be blacke, and make a powder thereof, and take of that powder, with the like quantitie of salt, then straw it vnder and aboue your fyles, which shalbe layd in a square yron, couered with a lid of yron, ye shall straw your powder thick thereon, and then shut it This ye shall make red hot altogether in a hote fire, and quickely quench it in cold water, and so let it tole therein, and it will be good and hard.

To harden another way all kind of tooles.

Take the iuyce of Pentafilon, that growes in hearbs, which is a fiue leafed grasse, called of some Sinke-foyle, with so much of the iuyce of Wormewod, keepe this in a vessell of glasse. Then take Vieren (so called in Dutch) and stampe it & strain it thorow a cloth, and altwo strike o-

uer

uer with this, your yron being red hot, and as it dryeth in, strike it so againe, and it will make it hard.

Another good way to harden yron or steele.

Take the iuyce of an herbe, called Nigil Romana, in Latine it is called Melanthia, and make your yron red hot, & quench it therin. Againe, to make yron so hard that it will cut all other toles, make it red hot, and quench it in the iuyce of Houseleeke, which is called in Latine Pilocella.

To harden yron so hard as steele.

Take Snayles, and the first drawne water of a redie of the which water being taken in the two first moneths of harueſt, when it raynes, then still it, or taken in the end of May, then heat your yron red hot, and quench it therein, and it shall be as hard as steele.

Also take Fimus humanus, the dung of men, still it in a Lymbeck, so that no water come thereunto it, and that it may be somewhat drie when ye still it, and take ye heads of his sauour, the water ye shall distill twise in a newe glasse, in Baineo mary, that is, one glasse within another in a pot of water.

Ye may do the like, stil mens blod of a man of 30. yeres and of sanguine complexion, warme, and moyst, & being of a merie nature, and pleasant, and whole & sound of bodie, such a man to be let blod in the middest of his age, & that hath plenty of blod, distill of his in the midst of May or in May. And thus by proofe, & also the water of mans dung, if it be wel and rightly stild, heat your yron glowing hot, and quench in that water, so it will make it as hard as steele. But if that water be not rightly stild, ỹ yron wil not hardē therwith, but be as soft as it was before.

To make yron or ſteele hard.

Take the iuyce of Warnen, cald in Latine Varbena, and ſtraine it into a glaſſe, and ye ſhall quench any yron, take thereof, and put to of mens piſſe, and the diſtild water of wormes, ſo mixe altogether, and quench therein ſo farre as ye will haue it hard, but take heede it be not to hard, therefore take it forth ſome after, and let it cole of it ſelf, for when it is well ſeaſoned, ye ſhall ſee golden ſpots on your yron.

Alſo the cõmon hardning of yron or ſteele, is in cold water, & ſnow water, ſo when the edge ſhall ſeeme blew after his hardning, ſignifieth a good ſign, and a right hardning.

To make ſteele hard, and to cut well.

Take an hearbe called Dre tongue, or langdebefe, ſeeth it in water, both the rootes and leaues, then make your yron or ſteele red hot, and quench therein, and ye ſhall ſee erperience. Alſo take the yealow flagge, called in Latine Spatula fœtida, ſome doe cal it Spurge-wort, take with it Warnen, of either like quantitie, then ſeeth them together in faire water a good ſpace, and then let them ſtand and cleare till it be cold, then heat your yron or ſteele red hot, and quench therein.

Ye may make muſtard, and put Vineger vnto it, and quench your mettals therein. Alſo ye may take the iuyce of earth-wormes, with the iuyce of houſeleeke, beat them together, then ſtraine them, and quench therein, or take of mens haire, and haire of beaſts, and ſeeth them in water till the water ware reddiſh colour, then let it cole, ſtraine it, and quench therein.

And ſome do quench in the iuyce of radiſh, & the iuyce of ſmallage mixt together, and fine the pouder of Roſin put therein,

therein, and therein quench your mettals. Againe, they take the iuyce of Veruin, and the iuyce of an hearbe called Dragons blood, and of ſcraped horne, with halfe ſo much ſalt, the iuyce of earth-wormes, and the iuyce of radiſh, put all theſe together aforeſayd, & therein quench your mettals, this way aforeſayd are verie good to make your mettals ſo hard as ye would deſire, and make them whole, faire, and bright withall.

To make yron hard without any crackes, clefts, or warpinges.

Take firſt ſuet or tallow of a beaſt, and melt it, then put it in ſome pot, or ſome other veſſell, whereas cold water is, and this molten ſuet muſt be a finger thicke vpon the ſayd water, and when ye will harden any thing, ye muſt put it downe ſoftly thorow the ſuet, into the ſayd water, and the quenching firſt in the ſuet, and then in the Water, it doth ſaue it without cracke, cleft, or warping.

Another way to harden yron.

Take the iuyce of Varuin, and take of land wormes in the field, after the Plough, or a nights in Gardens, and put a pinte of thoſe wormes into a leaded pot, then put vnto a good handfull of ſalt, then ſtirre them well, and ſo there will come a water of them, and that water ſtraind vnto the water or iuyce of Varuin, and when they bee together, ye ſhall quench therein. This way is good for all weapons.

A way to harden Pikeaxes, Fyles, or other tooles.

Take the iuyce of radiſh, the iuyce of Cadlot, the iuyce of great

great wormes, a quantitie of Goates blood, mix all together, and your weapons being ground, quench therein, and likewise your yron, to make it hard. But to harden Dayles, Axes, Knives, & such, is to quench in the iuyce of radish, also men oft times to make files hard, do quench in Linsæd oyle, or with scrapt horne, or with gotes blood.

To harden tooles to hew all other.

Ye shall gather of field snayles, or house snayles, with their shelles, then stampe them a little, and distill them in a Limbecke, and in that distild water, harden your stæle or yron, but if ye will haue it verie hard, ye shall take sand and brimstone, and grinde them together, and so strewe it on your yron or stæle being red hote, and then quench it in the sayd water, and they will be verie hard.

A way of hardning of Augars, Persars, and such like.

Ye shal take of mens vrine old and cold, with the iuyce of varuen, and the iuyce of wormes, of each like quantie, then stir it well altogether, and so quench your mettals therein, so far as ye will haue it hard, then let it cole softly of it selfe, till ye see spots like gold rise thereon, then take it out of the sayd water, and they will be well.

To set a colour or vernish on yron.

To vernish yron or stæle, take the gall of a Calfe (and your yron or stæle being clean vernished) take and strike with a cloth your gall thereon, and then let it drie in the sunne, and it will shew like a gold colour.

To

To colour tinne, or copper, or to colour the buckles of gyrdles, and ſuch like.

Take of Linſéd oyle ſo much as ye lyſt, ſet it on the fire, and ſcumme it cleane, then put therein of Amber, and of Aloparicum, in like portion, then beat and ſtir it wel altogether, with the oyle ouer the fire, till it ware thicke, then take it from the fire and couer it cloſe, then ſet it in the earth three dayes, and when ye liſt to occupy therof, ſtrike your mettal all ouer therewith, and ſo let it drie as aforeſayd in the Sunne, and ſo ye ſhall haue a golden colour.

How to guild vpon yron or ſteele.

Take a quantitie of wine ſtone, with as much Salarmoniac, and like of Verdigreaſe, and ſome ſalt, then ſæth altogether in white wine, then ſtrike all ouer your burniſhed yron or Steele, and let burne in the ſunne as before, and ye may guild thereon with common gold as the order is: and ſo it will be faire and good.

To guild yron with a water.

Take of water or running water, for 3. pound of water, take two pound of Roch allom, and an ounce of Vitriol Romane, & a peny weight of verdigreaſe, of ſalgemma 3. ounces, one ounce of Orpement, then boyle al theſe togither, and when it begins to boyle, put in ſom lyes of tartar, and bay ſalt, of euery halfe an ounce, make it ſæth and being ſod a prety while, take it from the fire, & then ſtrike your yron therewith. then let it drie againſt the fire, and being drie, burniſh it, and it will be faire.

To guild on yron another way.

Take 4. ounces of linſæd oyle, of Tarter or wine lyes two ounces, and two ounces of the yolkes of hard rosted egges stampt, of Alio Cicotrinum 1. ounce, a quarter of a dram of saffron, then boyle all these in an earthen pot a good space, & if the oyle of linſæd couer not all ỹ substance, put therto sufficient of water, then annoint your burnished yron therewith, & it will shew as the color of gold.

To cast a silver colour on Copper for buckles of harneſſe and such.

Take of wine stone, of Allom, and of salt, of each like quantitie, then grind thē altogether on a Painters stone, and put therto a leafe or two of silver, and so grind it well with the rest of your stuffe, so done, then put it in a leaded pot of earth, and therein put your Copper a little while, so done, then scrape it with your wyer brush, then ye shal se it be well, if not, let it remaine therein long, and so wil it be faire.

To guild yron as Goldsmiths doe, with quicke silver, and gold foyle.

Take vitriol 1. ounce allom 2. ounce, salarmoniac 1. oũce then beat these into powder, and boyle it in common water, then take your burnished yron, & al to wet it with the sayd water, so then lay your goldfoyle thereon, & dry it against the fire, then burnish it as men do, & so it will loke faire, but if ye will gild with gold mixt with quicksilver, as Goldsmiths do, ye shall put in a dram of verdigreaſe, with half an oũce of Sublimatum, so boyle them together, & let your yron beile in the same water, but being so great

ye

ye cannot, then rub it therwith, & heat it to receiue better the colour, with quick siluer and gold, & when ye haue so heated your yron, ye may gild with the same gold so mixt and then fume it with a fire lampe, or brunstone, or ware.

A good way to burnish yron.

Take an ounce of Alopaticum citrinum, an ounce of Amber, then mix and beat them together into a powder, the set it ouer the fire of coles in a earthen pot, & make it not to hote at the first, but when it is molten, put thereto a quantitie of sething oyle, and stir it well together with a sticke, then let it rest, take it from the fire and cole, and so keepe it, and with this you may burnish at pleasure, as ye doe other mettals.

To sowder on cold yron.

Take two ounces of Salarmoniac, two ounces of salt, 2. ounces of winestone made in pouder 2. ounces of clock spice, so cald in dutch, 6. ounces of loking glasse, beate all these, and mingle them wel together, then put them in a linnen cloth, and lay it round, a finger thicke with good clay, which clay must be wel tempered. Then put them in a leaded pot of earth, & couer it with another like pot of earth, then sette it softly on glowing coles, so let it softly warm, and by little & little increase your heat, till the sayd stuffe be al glowing hot and run, so done, then it cole frō the fire, then take it forth and breake it small, and so grinde it to a fine powder, and when ye will sowder any yron, yee must make it fast on a bord, and see that the ioynts bee sette as close together as ye can, and first lay a paper vnder your yron, & put of the sayd powder a little betwixt the sayd ioynts, and also vpon all the ioynts, then wrappe it all rounde with clay, sauing aboue,

which ye ſhall leaue open to ſolder at, then take of the powder of Burras, and put it in wine luke warme, or Aquanite, and ſo let it melt therein, ſo done, take of the ſame wine, and with a feather ſtrike on the ioynts aboue which be vncouered, then it will begin to ſæth, ſo when it leaueth ſæthing, it is then whole ſolderd and ſound, then being ſo, take of your clay, and ſuch roughneſſe as doth remaine on the ioynts, which ye ſhal not file of, but grind it off, and thus it ſhall be well.

Another way to ſolder warme on yron or ſteele.

Take of gum water, and beat therewith ſome hearbs, which hearbes, it ſhall not ſkill what, and make it thicke as a paſt, and when ye will ſolder any place, ſtrike thereon, or lay it on the ioynt, then rub it thereon with ſope, and then hold thereto a fire coale, and it will runne. Then waſh off the ſayd dough from the ſolderd place, and ſo it will be faire.

To ſolder on Copper.

Take an ounce of Coperas, halfe an ounce of white Arſenicke, which is called white Orpement, then make your Copper to runne, and diuide your Arſenicke in two parts, then caſt one part into your Copper, and ſtirre it well all together, and then caſt in the other part of your Arſenick to your copper, and ſtir it well together, ſo done, caſt it on a ſtone, and ſpread it thin, and when it is cold, beate it into a fine powder, and vſe it likewiſe, as the other beforementioned.

To ſolder on Latten.

Ye muſt file your latten cleane all ouer, then put the ioynts

toynts cloſe together, and therein ſcrape quickely your Burras, ſo ye ſhall ſee it well ſowdred.

Another ſowder to ſowder on yron.

Ye ſhall ſet your toynts of yron as cloſe as ye may, the one vnto the other, then lay them ſo in glowing coles, and then take of Venis glaſſe, made in fine powder, and your yron being red hot in the fire, caſt the pouder of your glaſſe thereon, and ſo it ſhall ſowder of himſelfe, and be verie ſtrong withall. And if yee clap it in clay as afore ſaid, ye ſhall not doe amiſſe.

Another good way to guild on yron or Steele.

Take one ounce of Orgall, or Orgyes, in dutch ſo named, with a third part of Vermillion, and a fourth part of Bolearmoniac, with as much of Aquauite, then worke and grind them altogether on a ſtone with linſeed oyle ſo done: put thereunto ſome of the ſtone called Lapis Calaminaris, the bigneſſe of a hazel nut, and grind therwith in the end, three or foure drops of Varnith, ſo take it off the ſtone, and ſtraine it thorow a linnen cloth into a ſtone potte, for it muſt bee as thicke as hony, ſo keepe it, and ſtrike it whereon ye liſt, and ſo let it drie, and then yee may lay your gold or ſiluer thereon, as afore ſayd.

A Varniſh like gold, for tinne, ſiluer, or buckles of Copper.

Ye ſhall haue ſmall pots well leaded, then put therein 6. ounces of Linſeed oyle, 1. ounce of Matticke, 1. ounce of Aloepaticum citrium, then make them altogether in fine powder, and then put them into your ſayd oyle, & couer it

with ſuch another pot, which pot aboue ye ſhall make a ſmall hole in the bottome therof, wherin ye ſhall put thorow a ſmall ſticke, with a broad end beneath, to ſtir the other pot withall, and when the pots are ſet iuſt together, one to the other, yee ſhall cloſe them all about with good clay, and couer them all ouer alſo, in leauing but the hole open aboue, with the ſtick to ſtir the other pot, ſo done, ſet them ouer the fire, in ſtirring it oft, as it doth ſeeth, like Painters verniſh, and when ye will guild therwith, poliſh your mettall firſt all ouer, and then ſtrike the verniſh all ouer therein, and then let it dry in the Sunne, if it lye to thin, ſtrike it ouer againe ſo often as yee ſhall thinke good, and ſo let it dry betwixt your ſtriking, and then yee ſhall ſee it will doe well.

A way to graue on yron or ſteele, or other kind of weapons.

Take cole of a willow or ſallow, two parts of Vitriol or Coperas, two parts of Salarmoniac, worke & beat all theſe together well with Vinger, & make it thick like broth, and when ye will eat or graue any thing withall, drawe firſt thereon with this thinge following. Take Vermilion, an linſeed oyle mixt altogether, thē dry it, & lay it ouer with your paſt a finger thicke or more, & the warmer it is, the ſoner it will graue and eate, but ſee to it, it burne not, and when it is dryed well, doe off the ſayd powder, and cleanſe the caſting out, then take 2. partes of ſpaniſh greene, cald verdigreaſe and a part of ſalt, then beat them together in a morter, and put vnto it ſtrong vineger, & do as it is aboue ſayd, or take Vitriol, allom, ſalt, Lapis calamynaris, vineger, and ſallow cole, and make it as the other aforeſayd, or take 2. parts of Vitriol, & a third part of ſalarmoniac, & grind them well all together on a ſtone with vrine or piſſe, then lay it on as it is aforeſayd

ſayd

ſayd, but yee muſt lay it cold on, and ſet it then foure or fiue houres in a Seller, or low cole place, for it will be the better.

A water to eat or graue on yron or ſteele.

Take of verdigreaſe, of Mercuris ſublyme, of vitrioll, and of Allom, of each alike, then beat them ſmall, and ſo put it into a glaſſe, ſo let it ſtand halfe a day, and ſtirre it often, then ſtrike it all ouer with ware, or yealow lead, mixt with linſeed oyle, or Liſen ſmout, ſo called in dutch, and ſtrike thereon with the water in the glaſſe, and let it ſtand halfe a day, but if ye write or lay thin that the water may eat it the ſoner, which ye ſhall couer all the yron or ſteele thin with ware, and to drawe thereon what yee liſt with a penſill in the war, vnto the ground, then ſtrike your water all ouer, and ſo it ſhall eat on your grauen places, or lay thereon Mercurie ſublimatum in your grauen places, and put thereunto Wineger, and ſo let it reſt halfe an houre after, and it will doe well.

Another water to eat on yron or ſteele more ſtronger.

Take an ounce of Verdigreaſe, halfe an ounce of Allom Plumoſum, and half an ounce of Salarmoniac, as much of wineſtone, and halfe an ounce of vitrioll, and as much of common ſalt, let all be ſmall beaten, & ſo put together, and put therto of ſharp vineger, & ſo let it ſtand an houre, and when to graue or eat any thing therewith, it muſt be firſt grauen, & ye ſhall write with Liſen ſmout, or yealow colour, then let it dry, and then make your foreſaid water hot in a leaded pan, and let it ſtand ouer the fier, and hold your yron and ſteele ouer the pan, and poure of that hot water thereon with a ladle, that the reſt may fall againe into the foreſayd panne, thus muſt ye doe ſtill a good

quarter

quarter of an houre, and thus doing, then take ashes or vnsleakt lime and rub it, and loke of that ye would haue eaten, if it be cleane or not, if not, drawe it againe with your yealow matter, and then poure on your said water, and so ye shall haue it well.

To lay gold vpon yron or other mettall.

Take of liquid varnish 1.ℓ. of Turpentine and oyle of linsed, of each 1. ounce, then mixe them altogether, and so reserue it, on this ground ye may guild vpon any mettall.

Another way to guild yron.

Take of Bolearmoniac, & white gum, of each 1. ounce, then put it into a pot of earth well leaded, and let it seth therein softly with a fire of coles, and put therin 2. ounces of linsed oyle, and when it doth rope like a thread, it is then a signe it is ynough sod, with which yé may vse to guild as is afore declared, by these and such practises in mettals, ye may finde out the like of other hereafter.

A water to eat on mettals.

Take an ounce of Saltpeter, an ounce of coperas, beat them together, and put them into a double glasse, & distill a water thereof, then take yealow or red way, and spread it as thin as paper on what mettall yee will, or weapon, then drawe thereon ts the ground with a pensill of stéle or other, then all to strike it ouer the drawne places with the sayd water distild, so let it remaine 24. houres, which water will eat on your yron or stéle sufficiently. The like way ye may doe with other sort of mettals.

FINIS.

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